MDTE No. 03 -

Exhibit FPR-2

Notice of Intent

King Street to Mill Street
23kV Electric Line Extension Project
Georgetown, Massachusetts

December 2003

Prepared for:

Massachusetts Electric Company
55 Bearfoot Road
Northboro, Massachusetts 01532

Prepared by:

Earth Tech, Inc.
196 Baker Avenue
Concord, Massachusetts 01742

196 Baker Avenue, Concord, Massachusetts 01742

December 8, 2003

Mr. Alan Bennett
Georgetown Conservation Commission
1 Library Street
Georgetown, MA 01833

Subject: **Notice of Intent Application – King Street to Mill Street 23kV Line Extension Project**

Dear Mr. Bennett,

Telephone
978.371.4000
Facsimile
978.371.2468

Please find enclosed a complete Notice of Intent Application for the above referenced project. Two copies of this Notice of Intent have been sent to the Northeast Region of DEP. Since the project crosses Estimated Habitat, a copy has also been sent to the Natural Heritage Program.

All abutters within 300 feet (Groveland and Georgetown) have been notified. Copies of this application have been submitted to the Georgetown Planning Board, Georgetown Building Inspector, Georgetown Board of Health, Georgetown Highway Department, and the Georgetown Zoning Board of Appeals. Enclosed are both state and local filing fee checks.

We look forward to meeting on December 18, 2003 to discuss the project with you. If the Commission wishes to have a site visit, we would be more than happy to have that prior to our scheduled December 18, 2003 hearing or thereafter as the Commission desires. If you have any further questions or comments please call me at 978-371-4216.

Very truly yours,

Earth Tech, Inc.

Timothy M. Sullivan
Environmental Scientist

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FORM 3

NOTICE OF INTENT
(UNDER THE MASSACHUSETTS WETLANDS PROTECTION ACT AND THE TOWN OF GEORGETOWN WETLANDS PROTECTION BYLAW)

- Appendix A – WPA Fee Transmittal Form
- Appendix B – Stormwater Management Form

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by DEP:

DEP File Number

Document Transaction Number

Georgetown
City/Town

A. General Information

1. Project Location (**Note:** electronic filers will click on button for GIS locator):

Existing electric line ROW form the Groveland line to the Mill Street junction

Georgetown — b. City/Town
01833 — c. Zip Code

Latitude and Longitude, if Known:
71'00'43.98" — d. Latitude
42'44'18.94" — e. Longitude

Various — f. Assessors Map/Plat Number
Various — g. Parcel /Lot Number

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.

2. Applicant:

N/A — a. First Name
N/A — b. Last Name
Massachusetts Electric Company (ATTN: F.P. Richards)
55 Bearfoot Road — d. Mailing Address
Northboro — e. City/Town
MA — f. State
01532 — g. Zip Code
4508-421-7549 — h. Phone Number
508-421-7520 — i. Fax Number
paul.richards@us.ngrid.com — j. Email address

3. Property owner (if different from applicant): ☐ Check if more than one owner

N/A — a. First Name
N/A — b. Last Name
N/A — c. Company
N/A — d. Mailing Address
N/A — e. City/Town
N/A — f. State
N/A — g. Zip Code
N/A — h. Phone Number
N/A — i. Fax Number
N/A — j. Email address

Note: Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

4. Representative (if any):

Earth Tech — a. Firm
Timothy — b. Contact Person First Name
Sullivan — c. Contact Person Last Name
196 Baker Avenue — d. Mailing Address
Concord — e. City/Town
MA — f. State
01742 — g. Zip Code
978-371-4216 — h. Phone Number
978-371-2468 — i. Fax Number
Timothy.Sullivan@earthtech.com — j. Email address

☐ Select if you want to see Wetland Fee Transmittal Form.

5. Total WPA Fee Paid (from Appendix A, Wetland Fee Transmittal Form):

$250 — a. Total Fee Paid
$112.50 — b. State Fee Paid
$137.50 — c. City/Town Fee Paid

6. General Project Description:

Construction of a new 23kV electric line within an established right-of-way.

A. General Information (continued)

7. Project Type Checklist:

   a. ☐ Single Family Home

   b. ☐ Residential Subdivision

   c. ☐ Limited Project Driveway Crossing

   d. ☐ Commercial/Industrial

   e. ☐ Dock/Pier

   f. ☒ Utilities

   g. ☐ Coastal Engineering Structure

   h. ☐ Agriculture – cranberries, forestry

   i. ☐ Transportation

   j. ☐ Other

8. Property recorded at the Registry of Deeds for:

   Essex County - South
   a. County
   4367
   b. Book
   546
   c. Page Number
   N/A
   d. Certificate # (if registered land)

9. Buffer Zone Only

   Is the project located only in the Buffer Zone of a bordering vegetated wetland, inland bank, or coastal bank, coastal beach, coastal dune, or salt marsh?

   a. ☐ Yes — If yes, skip to Section C.

   b. ☒ No — If no, check the resource areas to be affected by this project, directly below.

B. Resource Area Effects

1. Inland Resource Areas

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	N/A (1. linear feet)	N/A (2. linear feet)
b. ☒ Bordering Vegetated Wetland	100 (temporary) (1. square feet)	None proposed (2. square feet)
c. ☐ Land Under Waterbodies and Waterways	N/A (1. square feet) N/A (3. cubic yards dredged)	N/A (2. square feet)
d. ☐ Bordering Land Subject to Flooding	N/A (1. square feet) N/A (3. cubic feet of flood storage lost)	N/A (2. square feet) N/A (4. cubic feet of flood storage replaced)
e. ☐ Isolated Land Subject to Flooding	N/A (1. square feet) N/A (2. cubic feet of flood storage lost)	N/A (3. cubic feet of flood storage replaced)

f. ☒ Riverfront area

1. Name of Waterway (if available):

Parker River

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☒ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project:

Approximately 16,000sf within the Massachusetts Electric Company easement.
Square Feet

4. Proposed alteration of the Riverfront Area:

a. Total Square Feet	b. Square Feet within 100 ft.	c. Square Feet between 100 ft. and 200 ft.
200 (temporary)	100 (temporary)	100 (temporary)

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☒ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☒ Yes ☐ No

B. Resource Area Effects (continued)

2. Coastal Resource Areas:

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☐ Land Under the Ocean	N/A (1. Square feet)	
	N/A (2. Cubic yards dredged)	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	N/A (1. Square feet)	N/A (2. Cubic yards beach nourishment)
e. ☐ Coastal Dunes	N/A (1. Square feet)	N/A (2. Cubic yards dune nourishment)
f. ☐ Coastal Banks	**N/A** (1. Linear feet)	
g. ☐ Rocky Intertidal Shores	N/A (1. Square feet)	
h. ☐ Salt Marshes	N/A (1. Square feet)	N/A (2. Sq ft restoration, rehab., or creation)
i. ☐ Land Under Salt Ponds	N/A (1. Square feet)	
	N/A (2. Cubic yards dredged)	
j. ☐ Land Containing Shellfish	N/A (1. Square feet)	N/A (2. Square feet restoration, rehab.)
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	
	N/A (1. Cubic yards dredged)	
l. ☐ Land Subject to Coastal Storm Flowage	N/A (1. Square feet)	

3. Limited Project:

Is any portion of the proposed activity eligible to be treated as a limited project subject to 310 CMR 10.24 or 310 CMR 10.53?

a. ☒ Yes ☐ No If yes, describe which limited project applies to this project:

10.53 (3)(d) - construction of electric utility line
b. Limited Project

C. Bordering Vegetated Wetland Delineation Methodology

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Check all methods used to delineate the Bordering Vegetated Wetland (BVW) boundary:

1. ☐ Final Order of Resource Area Delineation issued by Conservation Commission or DEP (attached)
2. ☒ DEP BVW Field Data Form (attached)
3. ☐ Final Determination of Applicability issued by Conservation Commission or DEP (attached)
4. ☒ Other Methods for Determining the BVW Boundary (attach documentation):
   - a. ☒ 50% or more wetland indicator plants
   - b. ☒ Saturated/inundated conditions exist
   - c. ☒ Groundwater indicators
   - d. ☒ Direct observation
   - e. ☒ Hydric soil indicators
   - f. ☒ Credible evidence of conditions prior to disturbance

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

D. Other Applicable Standards and Requirements

1. Is any portion of the proposed project located in estimated habitat as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program?

   a. ☒ Yes ☐ No

   If yes, include proof of mailing or hand delivery of NOI to:
   Natural Heritage and Endangered Species Program
   Division of Fisheries and Wildlife
   Route 135, North Drive
   Westborough, MA 01581

   MassGIS 2003
   b. Date of Map

2. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

   ☐ Yes ☒ No

   If yes, include proof of mailing or hand delivery of NOI to:
   Massachusetts Division of Marine Fisheries
   251 Causeway Street, Suite 400
   Boston, MA 02114

   ☒ Not applicable – project is in inland resource area only

D. Other Applicable Standards and Requirements (continued)

3. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or DEP Website for ACEC locations). **Note:** electronic filers click on Website.

N/A
b. ACEC

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

a. ☐ Yes ☒ No

5. Is any activity within any Resource Area or Buffer Zone exempt from performance standards of the wetlands regulations, 310 CMR 10.00.

a. ☐ Yes ☒ No If yes, describe which exemption applies to this project:

N/A
b. Exemption

6. Is this project subject to the DEP Stormwater Policy? a. ☐ Yes ☒ No

b. If yes, stormwater management measures are required. Applicants should complete Appendix B: Stormwater Management Form and submit it with this form.

c. If no, explain why the project is exempt:

The project will not create a significant amount of new impervious surface. The project involves the installation of 19 new wooden utility poles.

E. Additional Information

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☒ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

E. Additional Information (continued)

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

3. ☒ Other material identifying and explaining the determination of resource area boundaries shown on plans (e.g., a DEP BVW Field Data Form).
4. ☐ List the titles and dates for all plans and other materials submitted with this NOI.
5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.
6. ☒ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.
7. ☐ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.
8. ☒ Attach Appendix A, see next page.
9. ☒ Attach Appendix B, if needed.

F. Fees

The fees for work proposed under each Notice of Intent must be calculated and submitted to the Conservation Commission and the Department (see Instructions and Appendix B. Wetland Fee Transmittal Form).

No fee shall be assessed for projects of the federal government, the Department, or cities and towns of the Commonwealth.

Applicants must submit the following information (in addition to pages 1 and 2 of Appendix B) to confirm fee payment:

123	12/5/03
1. Municipal Check Number	2. Check date
124	12/5/03
3. State Check Number	4. Check date
N/A	Massachusetts Electric Co.
5. Payor name on check: First Name	6. Payor name on check: Last Name

G. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

L. Paul Richards — Signature of Applicant — Date 12/5/03

Signature of Property Owner (if different) — Date

Signature of Representative (if any) — Date 12/5/03

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents; two copies of pages 1 and 2 of Appendix B; and the city/town fee payment must be sent to the Conservation Commission by certified mail or hand delivery.

For DEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents; one copy of pages 1 and 2 of Appendix B; and a copy of the state fee payment must be sent to the DEP Regional Office (see Instructions) by certified mail or hand delivery. (E-filers may submit these electronically.)

Other:
If the applicant has checked the "yes" box in any part of Section D, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

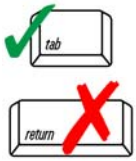
The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Appendix A – Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Applicant Information

1. Applicant:

N/A	N/A	Massachusetts Electric Co. (ATTN:F.P.Richards)
a. First Name	b. Last Name	

55 Bearfoot Road
d. Mailing Address

Northboro	MA	01532
e. City/Town	f. State	g. Zip Code

508-421-7549
h. Phone Number

2. Property Owner (if different):

N/A	N/A	N/A
a. First Name	b. Last Name	c. Company

N/A
d. Mailing Address

N/A	N/A	N/A
e. City/Town	f. State	g. Zip Code

N/A
h. Phone Number

3. Project Location:

Existing transmission right-of-way.	Georgetown
a. Street Address	b. City/Town

To calculate filing fees, refer to the category fee list and examples in Section D of this form.

B. Fees

Notice of Intent (Form 3) or Abbreviated Notice of Intent (Form 4):

The fee should be calculated using the following six-step process and worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract $12.50. To calculate the city/town share of the fee, divide the total fee in half and add $12.50.

WPA Appendix A – Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Category 2	1	$250	$250

Step 5/Total Project Fee: $250

Step 6/Fee Payments:

Total Project Fee: $250 — a. Total fee from Step 5

State share of filing fee: $112.50 — b. 1/2 total fee **less $**12.50

City/Town share of filling fee: $137.50 — c. 1/2 total fee **plus** $12.50

Abbreviated Notice of Resource Area Delineation (Form 4A):

The fee is calculated as follows (check applicable project type):

1. ☐ single family house project — a. feet of BVW _____ x $1.00 = _____ — N/A — b. Total fee not to exceed $1,000
2. ☐ all other projects — a. feet of BVW _____ x $1.00 = _____ — N/A — b. Total fee not to exceed $1,000

State share of filing fee: N/A — 3. 1/2 of total fee **less** $12.50

City/Town share of filing fee: N/A — 4. 1/2 of total fee **plus** $12.50

WPA Appendix A – Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C. Submittal Requirements

a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
Box 4062
Boston, MA 02211

b.) **To the Conservation Commission:** Send the Notice of Intent, Abbreviated Notice of Intent, or Abbreviated Notice of Resource Area Delineation; a **copy** of pages 1 and 2 of this form; and the city/town fee payment.

c.) **To DEP Regional Office** (see Instructions): Send the Notice of Intent, Abbreviated Notice of Intent, or Abbreviated Notice of Resource Area Delineation; a **copy** of pages 1 and 2 of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND ON WHITE PAPER

52-153
112

Massachusetts Electric
A National Grid Company
25 Research Drive, Westborough, MA 01582

Check No. 124 Date 12/05/03

VOID IF NOT CASHED IN 120 DAYS

Dollar Amount
**********112.50

One Hundred Twelve and 50/100 Dollars

PAY TO THE ORDER OF
Dept of Environmental Protection
Box 4062
Boston MA 02211

FLEET (MAINE) N.A.
South Portland, ME

Security features included. Details on back.

Authorized Signer

MP

⑈0000000124⑈ ⑆011201539⑆0080 018 0821⑈

THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND ON WHITE PAPER

52-153
112

Massachusetts Electric
A National Grid Company
25 Research Drive, Westborough, MA 01582

Check No. 123 Date 12/05/03

VOID IF NOT CASHED IN 120 DAYS

Dollar Amount
**********137.50

One Hundred Thirty-Seven and 50/100 Dollars

PAY TO THE ORDER OF
Town of Georgetown
1 Library Street
Georgetown, MA 01833

FLEET (MAINE) N.A.
South Portland, ME

Security features included. Details on back.

Authorized Signer

MP

⑈0000000123⑈ ⑆011201539⑆0080 018 0821⑈

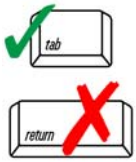
Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Appendix B – Stormwater Management Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. Property Information

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. The proposed project is:

a. New development	☐ Yes	☒ No	
b. Redevelopment	☐ Yes	☒ No	
c. Combination	☒ Yes	☐ No	(If yes, distinguish redevelopment components from new development components on plans).

2. Stormwater runoff to be treated for water quality is based on the following calculations:

   a. ☐ 1 inch of runoff x total impervious area of post-development site for discharge to **critical areas** (Outstanding Resource Waters, recharge areas of public water supplies, shellfish growing areas, swimming beaches, cold water fisheries).

   b. ☐ 0.5 inches of runoff x total impervious area of post-development site for other resource areas.

Note:
This November 2000 version of the Stormwater Management Form supersedes earlier versions including those contained in DEP's Stormwater Handbooks.

B. Stormwater Management Standards

DEP's Stormwater Management Policy (March 1997) includes nine standards that are listed on the following pages. Check the appropriate boxes for each standard and provide documentation and additional information when applicable.

Standard #1: Untreated stormwater

a. ☐ The project is designed so that new stormwater point discharges do not discharge untreated stormwater into, or cause erosion to, wetlands and waters.

Standard #2: Post-development peak discharges rates

a. ☐ Not applicable – project site contains waters subject to tidal action.

Post-development peak discharge does not exceed pre-development rates on the site at the point of discharge or downgradient property boundary for the 2-yr, 10-yr, and 100-yr, 24-hr storm.

b. ☒ Without stormwater controls

c. ☐ With stormwater controls designed for the 2-yr, and 10-yr storm, 24-hr storm.

d. ☐ The project as designed will not increase off-site flooding impacts from the 100-yr, 24-hr storm.

B. Stormwater Management Standards (cont.)

Standard #3: Recharge to groundwater

Amount of impervious area (sq. ft.) to be infiltrated: N/A
a. square feet

Volume to be recharged is based on:

b. ☐ The following Natural Resources Conservation Service hydrologic soils groups (e.g. A, B, C, D, or UA) or any combination of groups:

N/A 1. % of impervious area	N/A 2. Hydrologic soil group	N/A 3. % of impervious area	N/A 4. Hydrologic soil group
N/A 5. % of impervious area	N/A 6. Hydrologic soil group	N/A 7. % of impervious area	N/A 8. Hydrologic soil group

c. ☐ Site specific pre-development conditions: N/A (1. Recharge rate) N/A (2. Volume)

d. Describe how the calculations were determined:

N/A

e. List each BMP or nonstructural measure used to meet Standard #3 (e.g. dry well, infiltration trench).

N/A

Does the annual groundwater recharge for the post-development site approximate the annual recharge from existing site conditions?

f. ☐ Yes ☐ No

Standard #4: 80% TSS Removal

a. ☐ The proposed stormwater management system will remove 80% of the post-development site's average annual Total Suspended Solids (TSS) load.

b. Identify the BMP's proposed for the project and describe how the 80% TSS removal will be achieved.

N/A

B. Stormwater Management Standards (cont.)

c. If the project is redevelopment, explain how much TSS will be removed and briefly explain why 80% removal cannot be achieved.

N/A

Standard #5: Higher potential pollutant loads

See Stormwater Policy Handbook Vol. I, page I-23, for land uses of high pollutant loading (see Instructions).

Does the project site contain land uses with higher potential pollutant loads

a. ☐ Yes ☐ No b. If yes, describe land uses:

N/A

c. Identify the BMPs selected to treat stormwater runoff. If infiltration measures are proposed, describe the pretreatment. (Note: If the area of higher potential pollutant loading is upgradient of a critical area, infiltration is not allowed.)

N/A

Standard #6: Protection of critical areas

See Stormwater Policy Handbook Vol. I, page I -25, for critical areas (see Instructions).

Will the project discharge to or affect a critical area?

a. ☐ Yes ☐ No b. If yes, describe areas:

N/A

c. Identify the BMPs selected for stormwater discharges in these areas and describe how BMPs meet restrictions listed on pages I-27 and I-28 of the Stormwater Policy Handbook – Vol. I:

N/A

B. Stormwater Management Standards (cont.)

Note: components of redevelopment projects which plan to develop previously undeveloped areas do not fall under the scope of Standard 7.

Standard #7: Redevelopment projects

Is the proposed activity a redevelopment project?

a. ☐ Yes ☐ No b. If yes, the following stormwater management standards have been met:

N/A

c. The following stormwater standards have not been met for the following reasons:

N/A

d. ☐ The proposed project will reduce the annual pollutant load on the site with new or improved stormwater control.

Standard #8: Erosion/sediment control

a. ☒ Erosion and sediment controls are incorporated into the project design to prevent erosion, control sediments, and stabilize exposed soils during construction or land disturbance.

Standard #9: Operation/maintenance plan

a. ☐ An operation and maintenance plan for the post-development stormwater controls have been developed. The plan includes ownership of the stormwater BMPs, parties responsible for operation and maintenance, schedule for inspection and maintenance, routine and long-term maintenance responsibilities, and provision for appropriate access and maintenance easements extending from a public right-of-way to the stormwater controls.

N/A	
b. Plan/Title	c. Date
N/A	
d. Plan/Title	e. Date

C. Submittal Requirements

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

DEP recommends that applicants submit this form, as well as, supporting documentation and plans, with the Notice of Intent to provide stormwater management information for Commission review consistent with the wetland regulations (310 CMR 10.05 (6)(b)) and DEP's Stormwater Management Policy (March 1997). If a particular stormwater management standard cannot be met, information should be provided to demonstrate how equivalent water quality and water quantity protection will be provided. DEP encourages engineers to use this form to certify that the project meets the stormwater management standards as well as acceptable engineering standards. For more information, consult the Stormwater Management Policy.

D. Signatures

F. Paul Richards — Applicant Name

12/5/03 — Date

F. Paul Richards — Signature

Timothy M. Sullivan — Representative (if any)

12/5/03 — Date

Signature

GEORGETOWN BYLAW FORMS

GEORGETOWN CONSERVATION COMMISSION
Memorial Town Hall ♦ One Library Street ♦ Georgetown, MA 01833
Phone: (978) 352-5712 ♦ Fax: (978) 352-5725

Application under the Georgetown Wetland Protection Bylaw

Form 1, Adopted 23 June 1988
Voted to be Amended on January 20, 2000

The undersigned applicant hereby applies to perform "**activities**" (defined as removing, filling, dredging, building upon or "altering" as defined below) regulated by the Georgetown Wetland Protection Bylaw affecting "**resource areas**", as defined below, protected by the bylaw. There is included such information and plans as are deemed necessary by the Georgetown Conservation Commission to describe the proposed activities and their effects upon the environment.

I understand that **no activities shall commence** without receipt of and compliance with a permit issued under the bylaw, that is, no person shall fill, remove, dredge, build upon or alter the following "resource areas" without receipt of and compliance with a permit issued pursuant to the bylaw.

"**Resource areas**" are defined as follows:

1. Within 100' (feet) of any freshwater wetland, marsh, wet meadow, bog or swamp.
2. Within 200' (feet) of any bank, or flat, any lake, river pond, stream or estuary.
3. Any land under said waters.
4. Within 100' (feet) of any land subject to flooding or inundation by groundwater or surface water.

The term "**alter**" shall include, without limitation, the following activities when undertaken to, upon, within or affecting resource areas protected by this bylaw:

1. Removal excavation or dredging of soil, sand, gravel, or aggregate materials of any kink.
2. Changing or preexisting drainage characteristics, flushing characteristics, salinity distribution, sedimentation patterns, flow pattern, or flood retention characteristics.
3. Drainage or other disturbance of water level or water table.
4. Dumping, discharging or filling with any material which may degrade water quality.
5. Placing of fill or removal of material which would alter elevation.
6. Driving of piles, erection or repair of buildings or structures,
7. Placing of obstructions or objects in the water.
8. Destruction of plant life including cutting of trees.
9. Changing of water temperature, biochemical oxygen demand or other physical or chemical characteristics of water.
10. Any activities, changes or work which may cause or tend to contribute to pollution of any body of water or groundwater.

NOTE: *Failure to provide adequate evidence to the Commission showing project will not harm or by its cumulative effect will not harm wetlands shall be sufficient cause for the Conservation Commission to deny a permit or grant a permit with conditions.*

Eight (8) Copies of this Application with attachments shall be provided to the Georgetown Conservation Commission by certified mail or hand delivered.

GEORGETOWN CONSERVATION COMMISSION

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The Following is to be Completed by Applicant/Representative:

1. **Location of Project:** (Street & Number) Existing Electric Line North of Pentucket Pond

(Assessor's Map) Various (Lot) Various

2. **Owner's Name and Address:** Massachusetts Electric Company
55 Bearfoot Road
Northboro, MA 01532

(Essex South, Deed Book/Plan) Various (Page) Various

3. **Copy of Application and Description of Project to:** *Board of Health, Planning Board, Building Inspector, Board of Selectmen, Highway Department, Zoning Board of Appeals:*
☐ Certified Mail ☒ Hand Delivered *(with receipt)*

4. **Notice of Hearing Sent to Abutter:** ☒ Certified Mail ☐ Hand Delivered *(with receipt)*

5. **List of Abutters within 300' (feet) Certified by the Town Assessor:**
(Names and Addresses with Map and Lots) ☐ *(check)*

6. **Name and Address of Applicant:** Massachusetts Electric Company
55 Bearfoot Road
Northboro, MA 01532
Attention: Paul Richards

(Phone) 508-421-7549 (Fax) 508-421-7520

7. **Send Communications to:** Tim Sullivan, Earth Tech
196 Baker Avenue
Concord, MA 01742

(Phone) 978-371-4216 (Fax) 978-371-2468

8. **Name and Address of Engineer:** George Danek , Massachusetts Electric Company
1101 Turnpike Street
North Andover, MA 01845

(Phone) 978-725-1411 (Fax) 978-725-1036

9. **Description of Work (Project):**

a. In Flood Plain District: [ ] Yes [X] No *(check one)*

b. Nearest Flood Plain District: Parker River Flood Plain Elevation: 72-73

c. Elevation of Wetland: UNK *(feet)*

d. Elevation of Wetland for this Project at Lowest Level: UNK *(feet)*

e. Distance of Project from Wetland at Nearest Point: 0 *(feet)*

10. **Classification:** (*Check which Resource Area is or may be Involved within 100' (feet) of)*

[X] a. Freshwater Wetland

[X] b. Bank, Flat Pond or Stream

[ ] c. Land Under Said Waters

[ ] d. Within 100' (feet) of any Land Subject to Flooding or Inundation by Groundwater or Surface Water

11. **Check All Activities Which are or may be Involved:**

[ ] a. Removal

[ ] b. Drain

[ ] c. Changing Drain

[ ] d. Dumping

[ ] e. Placing Fill

[X] f. Erection of Structures

[X] g. Placing Obstructions in Water

[X] h. Cutting Trees or Destroying Plant Life

[ ] i. Changing Water Temperature

[ ] j. Any Which may Tend to Contribute to Pollution of Groundwater

[ ] k. Other *(please explain)* _____

12. **Sites Subject to Special Protection:**

Is any portion of the proposed project located in estimated habitat, which is indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by Natural Heritage Endangered Species?

a. Map Revision Date Used: [MassGIS 2003] *(latest copy on file with the GCC)*

b. Yes [X] No [ ] *(check one)*

c. If "Yes"... Submit and Entire Copy of this Application to:

Natural Heritage & Endangered Species Program
Division of Fisheries & Wildlife
Route 135, North Drive
Westborough, MA 01581

d. How Submitted? [X] Certified Mail [ ] Hand Delivered *(with receipt)*

13. Plans with Resource Areas & Buffer Resource Areas: *(Submitted with Application)* [X] *(check)*

14. Filing Fee Requirements: *(Check All that Apply)*

[X] a. Fee Calculation Worksheet Submitted

[X] b. Fee Transmittal Form Submitted

[X] c. Check Number Submitted: [#125] *(provide copy)*

[X] d. Filing Fee Paid: [$1050] *(fill in amount)*

☐ Make Local Filing Fees Payable to: **Georgetown Conservation Commission**

15. Respectfully Submitted By:

Signature of Applicant: Paul Richards Date: 12/8/03

Signature of Representative: Date: 12/5/03

(Do Not Write Below Line) (For Office Use Only)

Date Completed Application Received: [ ]

Date of Hearing: [ ]

GCC File Number: [ ]

Filing Fees Paid: [ ]

THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND ON WHITE PAPER

Massachusetts Electric
A National Grid Company
25 Research Drive, Westborough, MA 01582

52-153
112

Check No. 125 Date 12/05/03

VOID IF NOT CASHED IN 120 DAYS

One Thousand Fifty and NO/100 Dollars

Dollar Amount
********1,050.00

FLEET (MAINE) N.A.
South Portland, ME

Security features included. Details on back.

PAY TO THE ORDER OF
Town of Georgetown
1 Library Street
Georgetown, MA 01833

Authorized Signer

MP

⑈0000000125⑈ ⑆011201539⑆0080 018 082⑈

ATTACHMENT A

PROJECT NARRATIVE

ATTACHMENT A – PROJECT NARRATIVE

1.0 Introduction

On behalf of the Massachusetts Electric Company this Notice of Intent (NOI) is being filed by Earth Tech, Inc. (Earth Tech) pursuant to the Massachusetts Wetlands Protection Act (MWPA, M.G.L. Chapter 131, Section 40), it's implementing regulations (310 CMR 10.00), and the Town of Georgetown Wetlands Protection Bylaw (Chapter 161 of the Georgetown Code). Portions of the work proposed under this filing will take place within Bordering Vegetated Wetlands (BVW), the 200-foot Riverfront Area associated with the Parker River, and the 100-foot buffer zone to Bordering Vegetated Wetland or Isolated Vegetated Wetland (buffer zone).

The activities proposed in this filing coincide with the upgrades to the electrical transmission and distribution system in the Merrimack Valley. These upgrades are intended to help increase supply and reliability of service to residents of Georgetown and five other communities. This project involves the construction of a 23kV electric line section from the King Street Substation (Groveland) to the Mill Street Junction (Georgetown).

Limited Project Status

The 23kV line construction qualifies, for the limited project status. Specifically, the limited project is described as:

"The construction, reconstruction, operation, and maintenance of underground and overhead public utilities, such as electrical distribution or transmission lines, or communication, sewer, water and natural gas lines, … [310 CMR 10.53 (3)(d)]."

Although this project qualifies as a limited project, with the Commission's consent, all applicable performance standards will be met.

The Georgetown portion of the project involves the installation of a 19-structure 23kV line from the Groveland town line to the Mill Street Line Junction. The new line actually begins at the King Street substation in Groveland. The route of the new line will follow an existing and previously cleared electric line right-of-way (ROW). The line will cross Pond Street north of Pentucket Pond. A Notice of Intent has been filed with the Groveland Conservation Commission for the Groveland portion of the project.

This NOI includes a description of the proposed work, design details and construction methods that will be implemented in order to minimize potential permanent impacts to wetland resource areas, and proposed mitigation and minimization measures.

2.0 Existing Conditions

2.1 Existing Site Conditions

The current project will take place within the existing electric right-of-way (ROW) from the Groveland town line to the Mill Street Junction. The ROW is 80-feet wide and is fully cleared for most of the project corridor. Land use along the ROW consists of pasture, early successional upland areas, residential development, and scrub-shrub wetland.

2.2 Resource Area Delineation Procedure

Earth Tech wetland scientists delineated inland wetland areas in the vicinity of the proposed work in accordance with the Wetlands Regulations, Department of Environmental Protection (DEP) guidance for Delineating Bordering Vegetated Wetland (Policy 95-1), and the Army Corps of Engineers (ACOE) Wetland Delineation Manual (1987). These methods include environmental characteristics indicative of wetland resource areas such as hydrophytic vegetation, hydric soils, and hydrology.

A review of the following resources was conducted prior to the site investigation.

- United States Geological Survey (USGS) topographic map (shown in Figure 1). Indicates the project route crosses 1 intermittent stream.
- United States Department of Interior Fish and Wildlife Service National Wetland Inventory (NWI) map.
- United States Department of Interior Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) (Community Panel # 250081). No work will occur in an area designated as 100-year floodplain (shown in Figure 2)
- Natural Resource Conservation Service (NRCS) mapping of soil characteristics for the study area.
- Priority Habitats of Rare Species and/or Estimated Habitats of Rare Wildlife and Certified Vernal Pools. Reference to the Massachusetts Natural Heritage and Endangered Species Program Natural Heritage Atlas (MNH&ESP) (2003 MassGIS Edition) revealed that a portion of

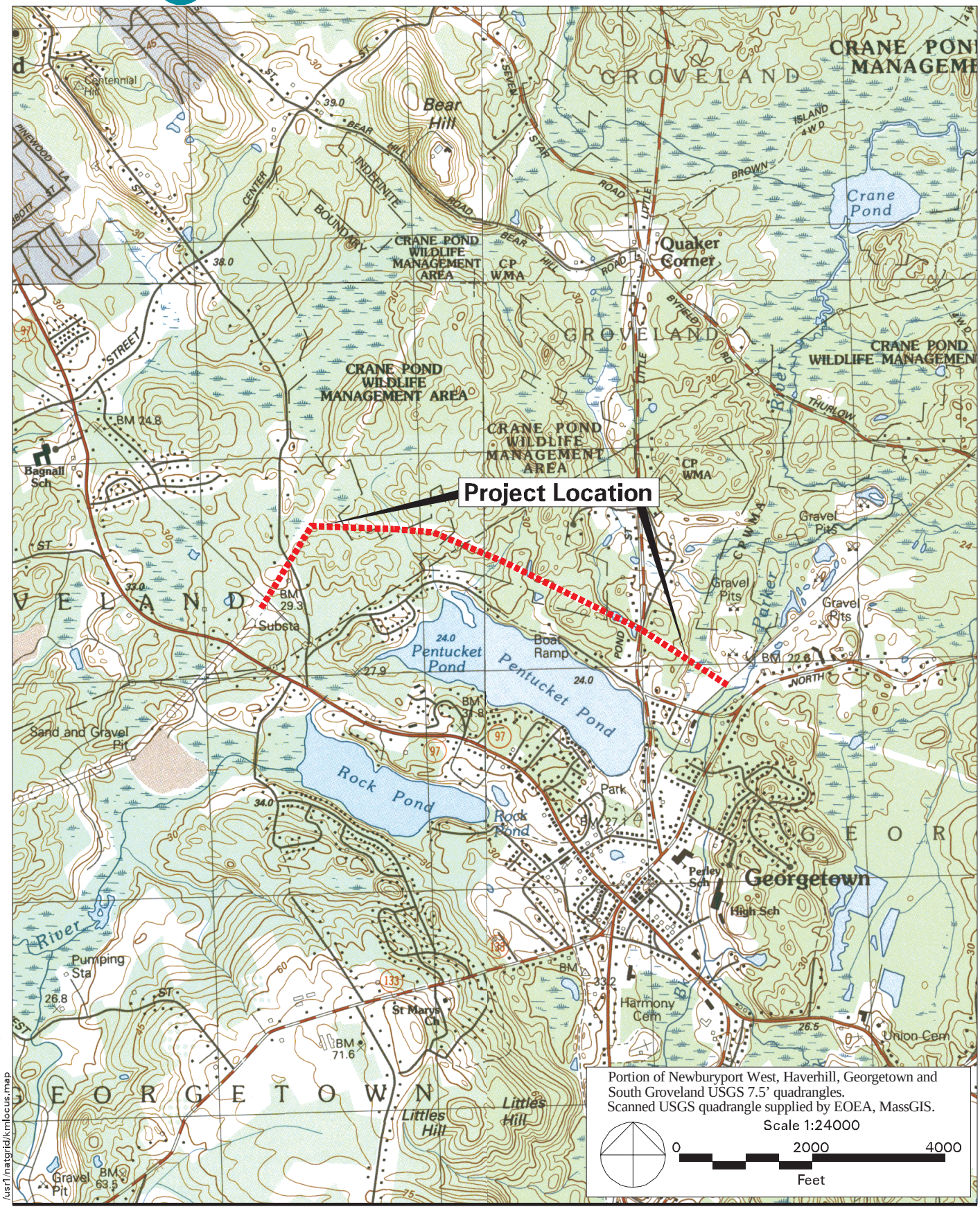
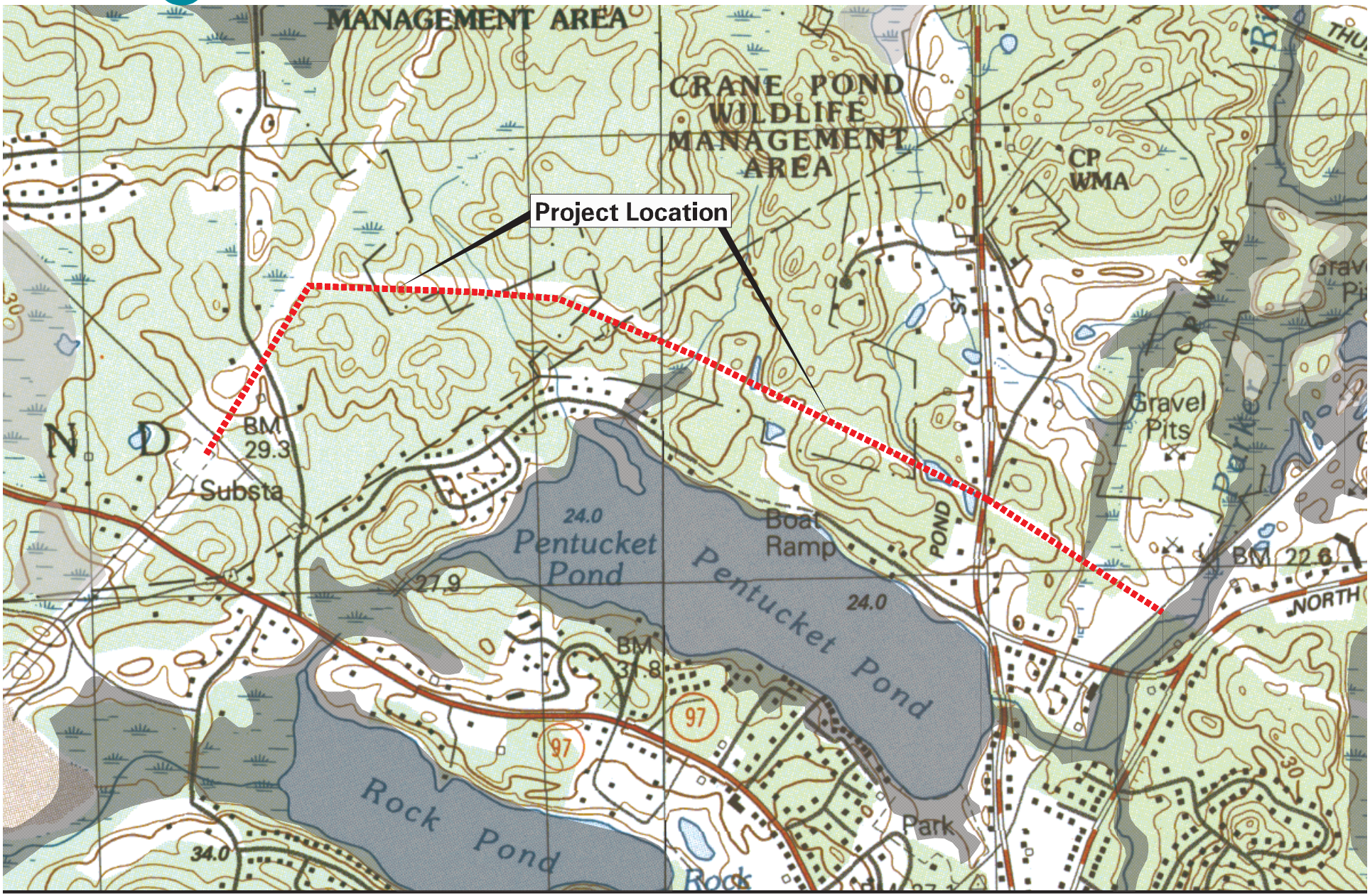


Figure 1
Site Locus Map



Date: 02 Dec 03 12:17:38 Tuesday
/usr1/natgrid/kmflood.map

100 - Year Flood Zone

500 - Year Flood Zone

Source: FEMA Q3 Digital FIRM data supplied by EOEA, MassGIS.

Figure 2
FEMA Flood Plain Map

Scale 1:12000
0 1000 2000
Feet

the project activities are within areas designated as Priority or Estimated Habitat for Rare, Threatened, or Species of Special Concern (shown in Figure 3).

- A review of the Executive Office of Environmental Affairs (EOEA)-Areas of Critical Environmental Concern (ACEC) program guide showed that the proposed project area is not within any ACEC.

2.3 Inland Wetland Resource Areas

Earth Tech wetland scientists delineated eight vegetated wetlands in the proposed project area. The eight resource areas were flagged in the field as wetlands ET13 to ET20. The boundaries of these resource areas, as well as the associated buffer zones are shown in Attachment E – Project Plans. The following is a description of each wetland.

Wetland ET13

Wetland area ET13 is located at the Groveland-Georgetown town line. This wetland is an intermittent stream channel with an associated scrub-shrub swamp. Wetland flags ET13-1 to ET13-24 establish the boundary of this wetland.

Wetland Area ET14

Wetland area ET14 is located just south of the substation. The wetland is an emergent BVW associated with an intermittent stream. Wetland flags ET14-1 to ET14-7 define the western boundary of the wetland and flags ET14A-1 to ET14A-7 define the eastern boundary of the wetland.

Wetland Area ET15

Wetland area ET15 is located in the center of the 2319 ROW. This wetland is a small isolated basin. Wetland flags ET15-1 to ET15-7 define the boundary of this wetland.

Wetland ET15 does not maintain a direct connection to any upstream river, stream, or pond. Therefore wetland ET15 does not meet the criteria of a bordering vegetated wetland as defined in the WPA.

Wetland Area ET16

Wetland area ET16 is located within and north of the 2319 line ROW. This wetland is seasonally flooded emergent wetland that continues well off ROW. It is assumed that the wetland connects to an offsite stream, river or pond. Wetland flags ET16-1 to ET16-14 establish the western boundary of

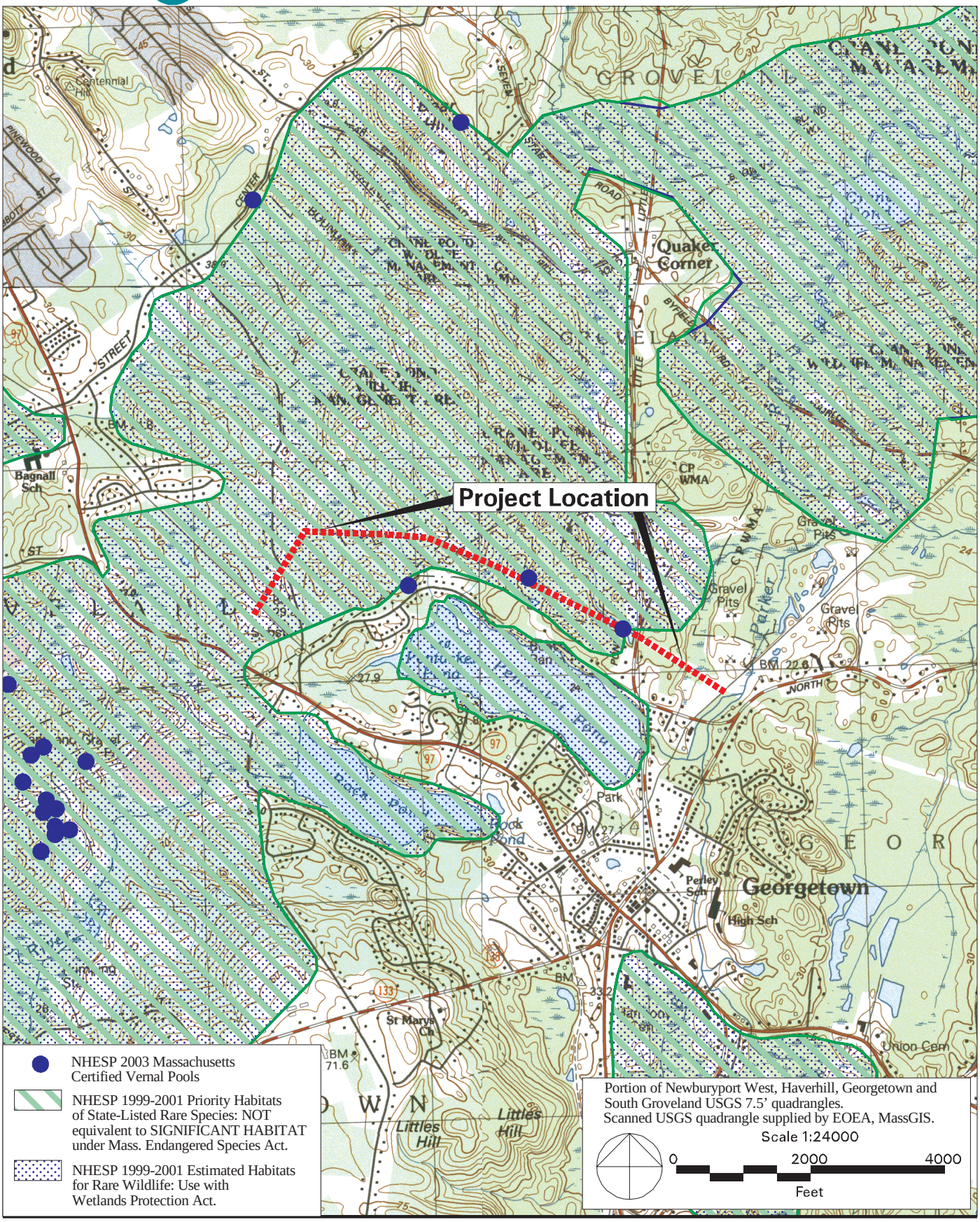


Figure 3
NHESP Habitat Map

this wetland, and flags ET16A-1 to ET16A-7. This wetland is a Certified Venal Pool.

Wetland Area ET17

Wetland area ET4 is located within the center of the 2319 ROW. The wetland is a very small low-lying area where water collects from nearby hills. Wetland flags ET17-1 to ET17-4 define the boundary of the wetland.

Wetland ET17 does not maintain a direct connection to any stream, river, or pond; therefore wetland ET17 does not meet the criteria of a bordering vegetated wetland as defined in the WPA.

Wetland ET18

Wetland area ET18 is located just west of Pond Street. Within the cleared ROW, the wetland is a scrub-shrub BVW. Off ROW this wetland is an expansive forested wetland. Wetland flags ET18-1 to ET18-40 define the southern and western boundary of the wetland. This wetland is a Certified Vernal Pool.

Wetland ET19

Wetland area ET19 is located within the 2319 ROW, just west of the Mill Street Junction. Within the cleared ROW, the wetland is a scrub-shrub BVW. Off ROW this wetland is an expansive forested wetland. There is a small upland Island in the middle of ET19. Wetland flags ET19-1 to ET19-6 define the western boundary of the wetland, and flags ET19A-1 to ET19A-14 define the eastern boundary of the wetland. Flags ET19U-1 to ET19U-10 define the extent of the upland island.

Wetland ET20

Wetland area ET20 is located just east of the Mill Street Junction. This BVW is associated with the western edge of the Parker River. Flags ET20-1 to ET20-15 define the western boundary of this wetland.

Additional information on dominant vegetation, hydrology, and soil characteristics can be found on the DEP BVW Forms and Earth Tech Isolated Wetland Forms included as Attachment B. Table 2-1 lists the resource areas associated with each wetland.

Table 2-1 Wetland Area Jurisdictions

Wetland Area	Resource Areas	Jurisdiction
Wetland ET13	BVW	WPA/Georgetown Bylaw
Wetland ET14	BVW	WPA/Georgetown Bylaw
Wetland ET15	IVW	Georgetown Bylaw
Wetland ET16	BVW	WPA/Georgetown Bylaw
Wetland ET17	IVW	Georgetown Bylaw
Wetland ET18	BVW	WPA/Georgetown Bylaw
Wetland ET19	BVW	WPA/Georgetown Bylaw
Wetland ET20	BVW/RFA	WPA/Georgetown Bylaw

2.4 Riverfront Area (310 CMR 10.58)

The most current USGS Quadrangle shows one unnamed stream crossing the ROW within what is delineated as Wetland ET14. This stream is shown as intermittent. The intermittent stream designation is further supported by the USGS Streamstats Report included in Attachment C – Agency Correspondence. Additionally, The Parker River is within the wetland delineated as ET20. Although the new line does not cross the river, work will occur within 200-feet of it.

3.0 Proposed Work Description

3.1 Proposed Work

2319 Electric Line

The 2319 line will require the installation of 19 single wooden utility pole structures within the established electric ROW. These poles will be placed approximately 20 feet south of the existing line. A hole the approximate diameter of the pole will be bored in the soil, the pole will be set in place, and the hole will be back-filled. Several (load carrying) structures will be secured additionally with guy-wires. Anchors (plank anchors in uplands and screw or manna-ray anchors in wetlands) will be installed to secure the guy-wires.

The electrical conductors will be installed using conductor reel stands and tensioning equipment. Access for structure installation and wiring will be obtained from established access points along Pond Street, Mill Street, and form Groveland. Access to each structure is shown in Attachment E – Project Plans.

4.0 Potential Impacts

4.1 Potential Impacts

Impacts will be mainly associated with soil disturbance, trimming or removal of vegetations, and placement of new pole structures and guy-wires.

In order complete the proposed project; work will occur within two state regulated resource areas (BVW and RFA) and the 100-foot buffer zone. A total area of 100 square feet of BVW will be impacted during the installation of pole 36. Of this 100 square foot alteration, all but the actual footprint of the pole will be temporary. Two poles will be placed within the Riverfront Area, accounting for 200 square feet of impact. Finally, 1,100 square feet of buffer zone will be disturbed by project related activities. A summary of individual impacts is provided in Table 4-1.

<u>2319 Electric Line</u>

Pole structure #36 is located within wetland ET19. Disturbance will be limited to the areas directly around the pole. An anticipated disturbance area of 100 square feet (10 feet by 10 feet) per pole is needed at each location. Screw anchors (non-displacing) will be used at this location to limit further disturbance to wetlands.

Pole structure #35 is located on the upland island within wetland ET19. A pole truck will cross the eastern portion of wetland ET19 to reach the pole location. An existing access way will be utilized to minimize impacts to the wetland.

Impacts within the buffer zone will be limited to minor soil and vegetation disturbance. Since the route follows an established electric ROW, only minor tree removal is anticipated within resource areas or buffer zones. Some tree trimming is anticipated along access routes to allow truck access and for line clearance.

A disturbance of 150 square feet (10 feet by 15 feet) is needed at each guy-wire and plank anchor, and an area of 100 square feet (10 feet by 10 feet) is needed at each new pole location. Screw and manna-ray anchors do not require earth disturbance and do not displace more than the width of the guy-wire. These anchors screw or are pushed into the ground.

Table 4-1 Resource Area and Buffer Zone Impacts

Project Facility	Resource Area	Impact
Structure #19	Buffer Zone	100sf
Structure #20	None	N/A
Structure #21	Buffer Zone	100sf
Structure #22	None	N/A
Structure #23	Buffer Zone	100sf
Structure #24	Buffer Zone	100sf
Structure #25	None	N/A
Structure #26	None	N/A
Structure #27	None	N/A
Structure #28	Buffer Zone	100sf
Structure #29	Buffer Zone	100sf
Structure #30	Buffer Zone	100sf
Structure #31	Buffer Zone	100sf
Structure #32	None	N/A
Structure #33	None	N/A
Structure #34	Buffer Zone	100sf
Structure #35	Buffer Zone	100sf
Structure #36	BVW RFA	100sf 100sf
Structure #36 ½	Buffer Zone RFA	100sf 100sf

Rare and Endangered Species

All of the proposed work in Georgetown west of Pond Street will take place in an area designated as both Estimated and Priority Habitat by the Massachusetts Natural Heritage and Endangered Species Program. The Natural Heritage Program identified seven potential rare species and two certified vernal pools along the project route. A copy of this letter is included in Attachment D – Agency Correspondence. The species of concern are listed in Table 4-2 – Potential Rare Species

Table 4-2 Potential Rare Species

Scientific Name	Common Name	Taxonomic Group	State Rank
Notropis bifrenatus	Bridle Shiner	Fish	Special Concern
Ambystoma laterale	Blue-spotted Salamander	Amphibian	Special Concern
Hemidactylium laterale	Four-Toed Salamander	Amphibian	Special Concern
Clemmys guttata	Spotted Turtle	Reptile	Special Concern
Emydoidea blandingii	Blanding's Turtle	Reptile	Threatened
Enallagma laterale	New England Bluet	Damselfly	Special Concern
Sparganium natans	Small Bur-reed	Vascular Plant	Endangered

Massachusetts Electric has engaged rare species experts from Hyla Ecological Associates to assess any potential impacts to rare species. Some of the listed species are unlikely to occur in the project area. For instance Bridle Shiners are typically found in major streams and water bodies. Small Bur-reed is an aquatic plant typically found in deep marsh and shallow pond waters. The project does not cross these types of habitats.

The most likely potential impacts are to the breeding areas of four-toed and blue-spotted salamanders. Hyla Ecological is currently in the process of

identifying valuable breeding sites so they can be avoided. Massachusetts Electric and Hyla Associates will meet with the Massachusetts Natural Heritage and Endangered Species Program personnel to discuss rare species issues associated with this project.

4.2 Proposed Minimization and Mitigation Measures

4.2.1 Avoidance and Minimization

Wherever possible work within resource areas and the buffer zone has been minimized. In some cases, the configuration of the ROW and existing facilities has made total avoidance of work in resource areas impossible. In cases where work in resource areas and buffer zones is required, disturbed areas (previously cleared electric ROWs) will be utilized to minimize impacts to pristine areas. Additionally, existing access points to the ROW will be utilized to limit disturbance.

By adjusting span lengths, 18 of the 19 structures have been placed outside of wetlands. In some cases the structures will be directly adjacent to wetlands to allow for spanning of the wetland. All guy-wire anchors within wetlands will be screw-type anchors.

The majority of the ROW from the Groveland town line is cleared to the full 80-feet. No large scale clearing is proposed along this portion of the line (although selective trimming or removal of trees maybe required). In sensitive areas (such as residential areas and partially cleared wetlands), new poles will be spaced twelve feet from the existing line instead of twenty feet. This will allow for reduced clearing in these select areas. The Massachusetts Electric Company must maximize line separation to minimize the potential for a single event, double line failure.

4.2.2 Timing

Depending upon the schedule associated with the companion Department of Telecommunications and Energy (DTE) filing for this line, Massachusetts Electric is proposing to complete as much of the work as possible prior to April 15, 2004. By utilizing this window, heavy equipment is not needed near wetlands during amphibian breeding season. In addition, by installing the poles while the ground is frozen, less rutting and soil disturbance will be caused by pole trucks and other construction vehicles. Negotiations will be held with MNH&ESP personnel on this matter too.

4.2.3 Sediment and Erosion Control Measures

Care will be taken during construction to minimize all disturbances to the buffer zones of wetlands. Refueling of all vehicles will take place outside of

resource areas and their buffer zones. Temporary siltation barriers (haybales or woodchip bags) will be established when a pole is being installed directly adjacent to a wetland area. Haybales will be broken up to serves as a mulch over exposed soil at these select locations.

4.4.4 Restoration

Areas temporarily disturbed by pole installation activities will be restored to pre-construction condition. All surface contours will be restored. As noted, straw mulch will be places over disturbed soils areas adjacent to wetlands to prevent sediment migration.

5.0 Summary

The existing wetlands, potential project impacts and proposed mitigation measures associated with the construction of the 19 poles of the new 2319 electric line have been fully documented in this Notice of Intent. The proposed project balances the needs of improving the reliability of electrical service to the residents of Georgetown and other north shore communities with the performance standards of the Massachusetts Wetlands Protection Act/Georgetown Bylaw. In addition, the project should be reviewed favorably by considering the following:

- The project has been designed to eliminate direct impacts to existing wetland areas wherever possible.
- The use of previously disturbed and cleared areas has been incorporated into the project design.
- Once online, the 2319 line will provide additional electric supply and reliability to the north shore area, relieving anticipated summer 2004 overloads.

ATTACHMENT B

WETLAND DELINEATION FIELD DATA FORMS

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: NEPCO/MECO Prepared by: Sullivan/Rabuyer Project location: King St/Mill St DEP File #: ________

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ☑ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation

Observation Plot Number: UP13 Transect Number: 3-7 Date of Delineation: 10/31/03

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
No Trees				
No Saplings				
Shrubs				
Sweet Birch (Betula lenta)	5% (3%)	18.2%	~~yes~~ no	—
Glossy Buckthorn (Rhamnus frangula)	5% (3%)	18.2%	~~yes~~ no	—
Black Raspberry (Rubus occidentalis)	15% (10.5%)	63.6%	yes	upl
	16.5			
Herbs				
Hay-scented Fern (Dennstaedtia punctilobula)	85% (85.5%)	100%)	yes	upl

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 0 Number of dominant non-wetland indicator plants: 2

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? (yes) no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

MA DEP; 3/95

1-5% - 3 6-15% - 10.5 16-25% - 20.5 26-50% - 38% 51-75% - 63% 76-95% - 85.5% 96-100% - 98%

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? (yes) no

title/date: Essex County Addition Part 1981
map number: 29
soil type mapped: Canton
hydric soil inclusions: yes

Are field observations consistent with soil survey? (yes) no
Remarks:
within cleared Row

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
A	0-6	10yr 3/2	5 1
B_{w1}	6-17	10yr 4/4	5 1
B_{w2}	17-18+	10yr 7/4	very st

Remarks:

3. Other:

Conclusion: Is soil hydric? yes (no)

Other Indicators of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☐ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other) : _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☐	☑
Wetland hydrology present:		
hydric soil present	☐	☑
other indicators of hydrology present	☐	☐
Sample location is in a BVW	☐	☑

Submit this form with the Request for Determination of Applicability or Notice of Intent.

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: NEPCo / MECO Prepared by: Sullivan / Rantzer Project location: King St / Mill St DEP File #:

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ☐ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation

Observation Plot Number: WET13 Transect Number: ET13-7 Date of Delineation: 10/31/02

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
NO TREES				
NO SAPLINGS				
Shrubs				
Mountain Holly (Nemopanthus mucronatus)	40 (38)	47.8%	YES	OBL
White pine (Pinus strobus)	10 (10.5)	13.2%	NO	—
Sweet Birch (Betula lenta)	10 (10.5)	13.2%	NO	—
Winterberry (Ilex verticillata)	25 (20.5)	25.8%	YES	FACW
	79.5			
Herbs				
Sensitive fern (Onoclea sensibilis)	20 (20.5)	37.6%	YES	FACW
Maidenhair fern (Adiantum pedatum)	15 (10.5)	19.3%	NO	—
Bristly dewberry (Rubus hispidus)	20 (20.5)	37.6%	YES	FACW
Rough stemmed Goldenrod (Solidago rugosa)	5 (3)	5.5%	NO	—
	54.5			

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 4 Number of dominant non-wetland indicator plants: 0

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? (yes) no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

MA DEP; 3/95

1-5% - 3 6-15% - 10.5 16-25% - 20.5 26-50% - 38% 51-75% - 63% 76-95% - 85.5% 96-100% - 98%

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? (yes) no

title/date: Essex County Northwest Part 1981

map number: 24

soil type mapped: Lanbon

hydric soil inclusions: yes

Are field observations consistent with soil survey? yes (no)

Remarks:

small wetland

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
A	0-12	10yr 2/1	0
Bw	12-18+	10yr 3/1	mf 7.5yr 4/4
	12-18+	10yr 4/2	

Remarks:

3. Other:

Conclusion: Is soil hydric? (yes) no

Other Indicators of Hydrology: (check all that apply and describe)

- ☑ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☑ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☑ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other) : _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☑	☐
Wetland hydrology present:		
hydric soil present	☑	☐
other indicators of hydrology present	☑	☐
Sample location is in a BVW	☑	☐

Submit this form with the Request for Determination of Applicability or Notice of Intent.

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: NEPCO / MECO Prepared by: Sullivan / Rondeau Project location: King St / Mill St DEP File #:

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ☑ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation

Observation Plot Number: WET14 Transect Number: ET14 - 3 Date of Delineation: 10/31/03

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
NO TREES				
NO SAPLINGS				
NO SHRUBS				
Red-osier dogwood (Cornus stolonifera)	35% (38%)	55.9%	YES	FACW+
Elderberry (Sambucus canadensis)	20% (20.5%)	29.7%	YES	FACW-
Spicebush (Lindera benzoin)	10% (10.5%)	15.2%	NO	—
		69%		
HERBS				
Sensitive fern (Onoclea sensibilis)	75% (63%)	100%	YES	FACW.
		63%		

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 3 **Number of dominant non-wetland indicator plants:** 0

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? (yes) no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

MA DEP; 3/95

1-5% - 3 6-15% - 10.5 16-25% - 20.5 26-50% - 38% 51-75% - 63% 76-95% - 85.5% 96-100% - 98%

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? (yes) no

title/date: Essex County Mullow Part 1981
map number: 24
soil type mapped: Canton
hydric soil inclusions: —

Are field observations consistent with soil survey? yes (no)

Remarks:
small BVW ARea

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
A	0-17	10yr 2/1	
Bw1	17-18	10y 5/3	) 5% mf 10yr 5/6
	18+	10y 5/2	

Remarks:

3. Other: hydric indicator a → 18"

Conclusion: Is soil hydric? (yes) no

Bucky

Other Indicators of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☑ Drainage patterns in BVW: _____
- ☑ Oxidized rhizospheres: _____
- ☑ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other) : _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☑	☐
Wetland hydrology present:		
hydric soil present	☑	☐
other indicators of hydrology present	☑	☐
Sample location is in a BVW	☑	☐

Submit this form with the Request for Determination of Applicability or Notice of Intent.

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: NEPCO/MECo Prepared by: Sullivan / Ramberger Project location: King St / Mill St DEP File #: ____

Check all that apply:

☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only

☑ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II

☐ Method other than dominance test used (attach additional information)

Section I. Vegetation

Observation Plot Number: UP 14 Transect Number: ET 14-3 Date of Delineation: 10/31/03

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
No Trees				
Saplings				
Sweet Birch (Betula lenta)	25% (20.5%)	50%	yes	FACU
Glossy Buckthorn (Glossy Buckthorn)	20% (20.5%)	50%	yes	FAC
	41%			
No Shrubs				
Herbs				
Rough stemmed Golden Rod (Solidago rugosa)	20% (20.5%)	66.1%	yes	FAC
unk Grass (Carex sp)	10% (10.5%)	33.9%	yes	?
	31			

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 1-2 **Number of dominant non-wetland indicator plants:** 2-3

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? (yes) no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

MA DEP; 3/95

1-5% - 3 6-15% - 10.5 16-25% - 20.5 26-50% - 38% 51-75% - 63% 76-95% - 85.5% 96-100% - 98%

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? (yes) no

title/date: Essex County Northern Part 1981

map number: 24

soil type mapped: Canton

hydric soil inclusions: ~~[illegible]~~ 420

Are field observations consistent with soil survey? (yes) no

Remarks:

within cleared row

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
	0-4	10yr 3/2 sl	
	4-48 +	10yr 5/4 sl	

Remarks:

3. Other:

Conclusion: Is soil hydric? (yes) (no)

Other Indicators of Hydrology: (check all that apply and describe)

- [ ] Site inundated: ______
- [ ] Depth to free water in observation hole: ______
- [ ] Depth to soil saturation in observation hole: ______
- [ ] Water marks: ______
- [ ] Drift lines: ______
- [ ] Sediment deposits: ______
- [ ] Drainage patterns in BVW: ______
- [ ] Oxidized rhizospheres: ______
- [ ] Water-stained leaves: ______
- [ ] Recorded data (stream, lake, or tidal gauge; aerial photo; other): ______
- [ ] Other: ______

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	[x]	[ ]
Wetland hydrology present:		
hydric soil present	[ ]	[x]
other indicators of hydrology present	[ ]	[x]
Sample location is in a BVW	[ ]	[x]

Submit this form with the Request for Determination of Applicability or Notice of Intent.

EARTH TECH
WETLAND SUMMARY FORM

Project: Kings St - Mill Street Flag Series: ET15-1 to ET15-7

Wetland ID: ET15

Observers: Sullivan / Ramberger Town: Georgetown

Date: 10/8/03 Time: 4pm Weather: Sunny

Dominant NWI Class: PSS Other NWI Classes:

Representative Vegetation (Record Species and Occurrence Percentage):

Trees:

NVC

Shrubs:

winterberry (Ilex verticillata) D

Red osier dogwood (Cornus stolonifera) C

meadowsweet (Spiraea latifolia) C

Saplings/Lianas:

NVC

Herbs:

Royal fern (Osmunda regalis) C

Marsh fern (Thelypteris thelypteroides) S

3-Square (Pulichium arundinaceum) C

D = dominant (>50%), A = abundant (26-50%), C = common (6-25%), S = scarce (<5%)

Representative Hydrologic Characteristics (Circle where appropriate)

Non-tidal:	Perm. Flooded		Semi Perm. Flooded		Seasonally Flooded	X	Tidal:	Subtidal		Irr. Exposed	
	Saturated		Int. Flooded		Art. Flooded			Reg. Flooded		Irr. Flooded	
Hydrologic Indicators:			Silt Deposition		Water-Stained Leaves					Water Marks	
			Drift Lines		Surface Scouring					Drainage Patterns	
			Buttressed Trees		Depth of Inundation:			X		Depth to Soil Saturation:	

Representative Soil Characteristics: ___ Mineral X Organic

Depth	Horizon	Matrix Color	Redox Features	Texture
0-18	O	2.5 N		Muck

Other Soil Observations:

River / Stream Data: Perennial / Intermittent

Depth @ Center:		Bank Height:											
Flow Rate:	Slow		Moderate		Fast		Bank Configuration:		Undercut		Vertical		Gradual	
Substrate	Peat-Muck		Silt-Mud		Sand		Gravel		Cobbles		Boulders			

Other Notes: IVW

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DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: NEPCO/MECO Prepared by: Sullivan/Reasons Project location: King St/Mill St. DEP File #:

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ☑ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation

Observation Plot Number: UP16 Transect Number: ET16A-4 Date of Delineation: 10/31/03

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
Trees				
Red Oak (Quercus rubra)	40% (38%)	100%	yes	FACU-
Saplings				
White pine (Pinus strobus)	5% (3%)	8.8%	no	—
Sweet Birch (Betula lenta)	10% (10.5%)	30.9%	yes	FACU
Red Oak (Quercus rubra)	20% (20.5%) 34	60.3%	yes	FACU-
Shrubs				
White pine (Pinus strobus)	30% (38%)	86.4%	yes	FACU
Male berry (Lyonia ligustrina)	5% (3%)	6.8%	no	—
Sweet Birch (Betula lenta)	5% (3%) 44	6.8%	no	—
Herbs				
Princess Pine (Lycopodium obscurum)	10% (10%)	100%	yes	FACU

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 0 **Number of dominant non-wetland indicator plants:** 5

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes (no) — "no" circled

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

MA DEP; 3/95

1-5% - 3 6-15% - 10.5 16-25% - 20.5 26-50% - 38% 51-75% - 63% 76-95% - 85.5% 96-100% - 98%

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? (yes) no

title/date: Essex County Northern Part 1981

map number: 24

soil type mapped: CANTON

hydric soil inclusions: 415

Are field observations consistent with soil survey? (yes) no

Remarks:

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
~~A~~	0-6	10yr 3/4	
Bw1	6-18+	10yr 4/4 51	

Remarks:

3. Other:

Conclusion: Is soil hydric? yes (no)

Other Indicators of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☐ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other) : _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☐	☑
Wetland hydrology present:		
hydric soil present	☐	☑
other indicators of hydrology present	☐	☑
Sample location is in a BVW	☐	☑

Submit this form with the Request for Determination of Applicability or Notice of Intent.

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: NEPCo / MECo Prepared by: Sullivan / Ramsey Project location: Kings St / Mill St DEP File #: ______

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ☑ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation

Observation Plot Number: WET 16 Transect Number: ET1CA-4 Date of Delineation: 10/31/03

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
No trees				
No saplings				
No shrubs				
Meadowsweet (Spirea latifolia)	35% (38%)	61.3%	yes	FAC+
Glossy Buckthorn (Rhamnus frangula)	15% (10.5%)	16.9%	—	—
Highbush blueberry (Vaccinium corymbosum)	10% (10.5%)	16.9%	—	—
Winterberry (Ilex verticillata)	5% / (3%) 62	4.8%	—	—
Herbs				
Wool Grass (Scirpus cyperinus)	5%	(3%) 5.8%	—	—
Marsh Fern (Thelypteris thelypteroides)	10%	(10.5%) 20.4%	yes	FACW+
Shallow sedge (Carex lurida)	45%	(38%) 73.8% / 51.5	yes	OBL

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 3 **Number of dominant non-wetland indicator plants:** 0

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? **yes** (circled) no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

MA DEP; 3/95

1-5% - 3 6-15% - 10.5 16-25% - 20.5 26-50% - 38% 51-75% - 63% 76-95% - 85.5% 96-100% - 98%

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? (yes) no

title/date: Essex County Northern Part 1981

map number: 24

soil type mapped: WATER

hydric soil inclusions: yes

Are field observations consistent with soil survey? (yes) no

Remarks:

Seasonally Flooded Pond

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
A1	0-8	10yr 2/1	SI
Bw1	8-18	10yr 4/1	SI

Remarks:

3. Other:

Conclusion: Is soil hydric? (yes) no

Other Indicators of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☑ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☑ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other) : _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☑	☐
Wetland hydrology present:		
hydric soil present	☑	☐
other indicators of hydrology present	☑	☐
Sample location is in a BVW	☑	☐

Submit this form with the Request for Determination of Applicability or Notice of Intent.

EARTH TECH
WETLAND SUMMARY FORM

Project: King St ext to mill street Flag Series: ET17-1 to ET17-4

Wetland ID: ET17

Observers: Sullivan / Ramberger Town: Georgetown

Date: 10/31/03 Time: 4:30 Weather: sunny

Dominant NWI Class: PEM Other NWI Classes:

Representative Vegetation (Record Species and Occurrence Percentage):

Trees: none

Shrubs: Steeple bush (Spiraea tomentosa) C

Saplings/Lianas: none

Herbs: Reed canary (Phalaris arundinacea) D

D = dominant (>50%), A = abundant (26-50%), C = common (6-25%), S = scarce (<5%)

Representative Hydrologic Characteristics (Circle where appropriate)

Non-tidal:	Perm. Flooded		Semi Perm. Flooded		Seasonally Flooded		Tidal:	Subtidal		Irr. Exposed	
	Saturated		Int. Flooded		Art. Flooded			Reg. Flooded		Irr. Flooded	
Hydrologic Indicators:		Silt Deposition		Water-Stained Leaves						Water Marks	
		Drift Lines		Surface Scouring						Drainage Patterns	
		Buttressed Trees		Depth of Inundation:						Depth to Soil Saturation:	

ox. Rhizosph

Representative Soil Characteristics: X Mineral ____ Organic

Depth	Horizon	Matrix Color	Redox Features	Texture
0-10	A	2.5y 3/1		
10-18	Bw	2.5y 6/2	mf 5/6	

Other Soil Observations:

River / Stream Data: Perennial / Intermittent

Depth @ Center:		Bank Height:											
Flow Rate:	Slow		Moderate		Fast		Bank Configuration:		Undercut		Vertical		Gradual	
Substrate	Peat-Muck		Silt-Mud		Sand		Gravel		Cobbles		Boulders			

Other Notes:

Very small low lying area

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DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: NEPCO/Mecco Prepared by: Sullivan/Ronbrugo Project location: King St/Mill St DEP File #: ______

Check all that apply:

- [ ] Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- [x] Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- [ ] Method other than dominance test used (attach additional information)

Section I. Vegetation

Observation Plot Number: 18 WET Transect Number: ET18-10 Date of Delineation: 10/31/03

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
No Trees				
No Saplings				
Shrubs				
Maleberry (Lyonia ligustrina)	25% (20.5)	33.1	Yes	FACW
Pepperbush (Clethra alnifolia)	25% (20.5)	33.1	Yes	FAC+
Glossy Buckthorn (Rhamnus frangula)	10% (10.5)	16.9	—	—
High bush blueberry (Vaccinium corymbosum)	10% (10.5) 62.	16.9	—	—
Forbs				
Marsh Fern (Thelypteris thelypteroides)	20% (20.5)	29.7	Yes	FACW+
Water willow (Decodon verticillatus)	15% (10.5)	15.2	—	—
Sphagnum (Sphagnum sp)	40% (38%) 69	55.1	Yes	OBL

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 4 **Number of dominant non-wetland indicator plants:** 0

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? (yes) no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

MA DEP; 3/95

1-5% - 3 6-15% - 10.5 16-25% - 20.5 26-50% - 38% 51-75% - 63% 76-95% - 85.5% 96-100% - 98%

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? (yes) no

title/date: Essex County Northern Part 1981

map number: 24

soil type mapped: Pond

hydric soil inclusions: yes

Are field observations consistent with soil survey? (yes) no

Remarks:

Seasonally flooded Pond

2. Soil Description

Horizon	Depth	Matrix Color		Mottles Color
A	0-6	10yr 3/2	5/	
Bw1	6-10	10yr 4/2	5/	
Bw2	10-18	10yr 4/1		

Remarks:

3. Other:

Conclusion: Is soil hydric? yes no

Other Indicators of Hydrology: (check all that apply and describe)

- ☑ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☑ Drainage patterns in BVW: _____
- ☑ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other) : _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☑	☐
Wetland hydrology present:		
hydric soil present	☑	☐
other indicators of hydrology present	☑	☐
Sample location is in a BVW	☑	☐

Submit this form with the Request for Determination of Applicability or Notice of Intent.

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: NEPCO/MECO Prepared by: Sullivan / Ramages Project location: King St / Mill St DEP File #:

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ☑ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation

Observation Plot Number: UP18 Transect Number: ET18-10 Date of Delineation: 10/31/03

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
Trees only				
Saplings				
Sweet Birch (Betula lenta)	25% (20.5)	100%	Yes	FACU
Shrubs				
Glossy Buckthorn (Rhamnus frangula)	35% (38%)	54.7%	Yes	FAC
Sweet Birch (Betula lenta)	15% (100%)	15.1%	no	—
Meadowsweet (Spiraea latifolia)	15% (10.5%)	15.1%	no	—
multiflora Rose (Rosa multiflora)	10% (10.5%)	15.1%	no	—
	69.5			
Herbs				
Bristly Dewberry (Rubus hispidus)	5% (3%)	22.2%	Yes	FACW
Roughstemmed Goldenrod (Solidago rugosa)	10% (10.5)	77.8%	Yes	FAC

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 3 **Number of dominant non-wetland indicator plants:** (

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

MA DEP; 3/95

1-5% - 3 6-15% - 10.5 16-25% - 20.5 26-50% - 38% 51-75% - 63% 76-95% - 85.5% 96-100% - 98%

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? (yes) no

title/date: Essex County Northern Part 1981

map number: 24

soil type mapped: CANTON

hydric soil inclusions: —

Are field observations consistent with soil survey? (yes) no

Remarks:

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
	0-8	10yr 3/2	
	8-18	10yr 4/4	

Remarks:

3. Other:

Conclusion: Is soil hydric? yes (no)

Other Indicators of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☐ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other) : _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☑	☐
Wetland hydrology present:		
hydric soil present	☐	☑
other indicators of hydrology present	☐	☑
Sample location is in a BVW	☐	☑

Submit this form with the Request for Determination of Applicability or Notice of Intent.

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: NEPCO/MECO Prepared by: Sullivan/Ramsayer Project location: Kings St/Mill St DEP File #:

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ☑ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation

Observation Plot Number: ~~1~~ 19 OP Transect Number: ET19A-6 Date of Delineation: 10/31/03

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
No trees				
Paper birch (Betula papyrifera) cut down				
No saplings				
No shrubs				
White pine (Pinus strobus)	20% (20.5%)	87.2%	yes	FACU
Glossy buckthorn (Rhamnus frangula)	5% (3%) 23.5	12.8%	no	—
Herbs				
Roughstemmed goldenrod (Solidago rugosa)	50% (38%)	61.8%	yes	FAC
Brisly dewberry (Rubus hispidus)	25% (20.5%)	33.3%	yes	FACW
Pokeweed (Phytolacca americana)	5% (7%) 61.5	04.9%	no	—

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 2 **Number of dominant non-wetland indicator plants:** 1

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? (yes) no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

MA DEP; 3/95

1-5% - 3 6-15% - 10.5 16-25% - 20.5 26-50% - 38% 51-75% - 63% 76-95% - 85.5% 96-100% - 98%

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? (yes) no

title/date: Essex County Northern Part 1981

map number: 24

soil type mapped: Pd

hydric soil inclusions: yes

Are field observations consistent with soil survey? (yes) no

Remarks:

near abandoned railroad row

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
A	0-5	10yr 3/2	
Bw1	5-12	10yr 5/3	
Bw2	12-18+	2.5y 5/4	mf 7.5y 5/6

Remarks:

3. Other:

Conclusion: Is soil hydric? yes (no)

Other Indicators of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☐ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other) : _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☑	☐
Wetland hydrology present:		
hydric soil present	☐	☑
other indicators of hydrology present	☐	☑
Sample location is in a BVW	☐	☑

Submit this form with the Request for Determination of Applicability or Notice of Intent.

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Nepco / Meco Prepared by: Sullivan / Rawlinson Project location: King St / Mill St DEP File #:

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ☑ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation

Observation Plot Number: WET 19 Transect Number: ET19A-6 Date of Delineation: 10/31/03

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)		C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
NO TREES					
no saplings					
~~A~~ shrubs					
Speckled Alder (Alnus rugosa)	15%	(10.5%)	38.9%	YES	FACW+
Winterberry (Ilex verticillata)	5%	(3%)	8.1%	NO	—
Glossy Buckthorn (Rhamnus frangula)	10%	(10.5%)	38.9%	YES	FAC~~W~~
Meadowsweet (Spirea latifolia)	5%	(3%) /27	8.1%	NO	
Herbs					
Purple loosestrife (Lythrum salicaria)	40%	(38%)	62.3%	YES	FACW+
Reed Canary Grass (Phalaris arundinacea)	10%	(10.5%)	16.9%	NO	—
Common Fern (Osmunda cinnamomea)	5%	(3%)	04.8%	NO	—
Rough stemmed Golden Rod (Solidago rugosa)	10%	(10.5%) /62	16.9%	NO	—

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 3 **Number of dominant non-wetland indicator plants:** 0

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

MA DEP; 3/95

1-5% - 3 6-15% - 10.5 16-25% - 20.5 26-50% - 38% 51-75% - 63% 76-95% - 85.5% 96-100% - 98%

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? (yes) no

title/date: Essex County Northern Part 1981

map number: 24

soil type mapped: Scarboro

hydric soil inclusions: Yes

Are field observations consistent with soil survey? (yes) no

Remarks:

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
O	0-6	2.5N/	muck
Bw1	6-18	10yr 5/1	SAND

Remarks:

3. Other:

Conclusion: Is soil hydric? (yes) no

Other Indicators of Hydrology: (check all that apply and describe)

- [x] Site inundated: _____
- [ ] Depth to free water in observation hole: _____
- [ ] Depth to soil saturation in observation hole: _____
- [ ] Water marks: _____
- [ ] Drift lines: _____
- [ ] Sediment deposits: _____
- [x] Drainage patterns in BVW: _____
- [ ] Oxidized rhizospheres: _____
- [ ] Water-stained leaves: _____
- [ ] Recorded data (stream, lake, or tidal gauge; aerial photo; other) : _____
- [ ] Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☑	☐
Wetland hydrology present:		
hydric soil present	☑	☐
other indicators of hydrology present	☑	☐
Sample location is in a BVW	☑	☐

Submit this form with the Request for Determination of Applicability or Notice of Intent.

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Nepo/Mocco Prepared by: Sullivan/Ramberger Project location: King St/Mill St DEP File #:

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
- ☑ Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II
- ☐ Method other than dominance test used (attach additional information)

Section I. Vegetation

Observation Plot Number: ET20 WET Transect Number: ET20-6 Date of Delineation: 10/31/03

A. Sample Layer and Plant Species (by common/scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*
No Trees				
No Saplings				
Shrubs				
Spicebush (Lindera benzoin)	25	41.7 %	Yes	FACW-
Red osier dogwood (Cornus-Stolonifera)	20	33.3 %	Yes	FACW+
Elderberry (Sambucus canadensis)	15	25 %	Yes	FACW-
Herbs				
Purple loosestrife (Lythrum Salicaria)	40	72.7	Yes	FACW+
Woolgrass (Scirpus cyperinus)	15	27.3	Yes	FACW+

* Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusion:

Number of dominant wetland indicator plants: 5 **Number of dominant non-wetland indicator plants:** 0

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes no

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

MA DEP; 3/95

1-5% - 3 6-15% - 10.5 16-25% - 20.5 26-50% - 38% 51-75% - 63% 76-95% - 85.5% 96-100% - 98%

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? yes no

title/date:

map number:

soil type mapped:

hydric soil inclusions:

Are field observations consistent with soil survey? yes no

Remarks:

2. Soil Description

Horizon	Depth	Matrix Color	Mottles Color
N/A.			

Remarks: Rocky River is in a manmade channel directly adjacent to the abandoned railroad Bed. No soils data taken.

3. Other:

Conclusion: Is soil hydric? yes no

Other Indicators of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☑ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other) : _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	☑	☐
Wetland hydrology present:		
hydric soil present	☐	☐
other indicators of hydrology present	☑	☐
Sample location is in a BVW	☑	☐

Submit this form with the Request for Determination of Applicability or Notice of Intent.

ATTACHMENT C

ABUTTER'S LIST AND NOTIFICATION INFORMATION

GEORGETOWN CONSERVATION COMMISSION

Memorial Town Hall ♦ One Library Street ♦ Georgetown, MA 01833
Phone: (978) 352-5712 ♦ Fax: (978) 352-5725

Notification to Abutters

Under the Massachusetts Wetlands Protection Act (MGL Chapter 131, § 40)
and/or
The Georgetown Wetlands Protection Bylaw (Chapter 161 of the Georgetown Code)

In accordance with MGL Chapter 131, § 40 and/or Chapter 161 of the Georgetown Code, you are hereby notified of the following hearing:

Applicant Name: Massachusetts Electric Company

Street Address: 1101 Turnpike Street

City/Town, State & Zip Code: North Andover, MA 01845

Type of Application Filed: Notice of Intent

Location of Proposed Project or Request:

Street Address or nearest public way(s) Existing powerline right-of-way north of Pentucket Pond
Georgetown, Massachusetts 01833.

Georgetown Assessor's Map & Lot(s): Various

Description of Proposed Project or Request: Construction of a second 23kV electric line within the right-of-way

A Public Hearing will be held on (day) DEC (date) 18 at TBD PM in the Basement Meeting Room of Memorial Town Hall, 1 Library Street, Georgetown, Massachusetts.

A copy of the application and plans may be examined at the Georgetown Conservation Commission during regular business hours. To schedule an appointment, call (978) 352-5712. A free copy of the application and plans may be obtained from either (check one) the applicant ____, or the applicant's representative X, by calling this telephone number (978) 371-4216 on the following days of the week: M-F.

Any person planning to build, cut trees, landscape, grade, fill, dredge or otherwise alter any Area Subject to Protection under the Massachusetts Wetlands Protection Act and/or the Georgetown Wetlands Protection Bylaw must file a Request for Determination of Applicability or a Notice of Intent with the Conservation Commission. Any person seeking confirmation of the delineated boundaries of any Area Subject to Protection under the Massachusetts Wetlands Protection Act and/or the Georgetown Wetlands Protection Bylaw must file a Request for Determination of Applicability and an Abbreviated Notice of Resource Area Delineation with the Conservation Commission. Areas Subject to Protection include: any wetland, any lake or pond, any vernal pool, any intermittent stream, any land subject to flooding or inundation, and within 100 horizontal linear feet thereof; and any perennial river or stream and within 200 horizontal linear feet thereof.

NOTE: Notice of the public hearing, including date, time and place, will be published in the Georgetown Record (alternate is Eagle Tribune) and will be posted in Town Hall not less than five (5) days before the hearing. You may contact the Georgetown Conservation Commission at (978) 352-5712 or the Department of Environmental Protection Regional Office at (617) 654-6500 for further information.

GCC:ab:12/1/03

ATTACHMENT D

AGENCY CORRESPONDENCE

Commonwealth of Massachusetts
Division of Fisheries & Wildlife
MassWildlife

Wayne F. MacCallum, *Director*

October 31, 2003

F. Paul Richards
National Grid USA
55 Bearfoot Road
Northborough, MA 01532

Re: King St. to Mill St. Electrical ROW and Substation
Georgetown and Groveland, MA
NHESP File: 03-12719

Dear Mr. Richards,

Thank you for contacting the Natural Heritage and Endangered Species Program (NHESP) of the MA Division of Fisheries & Wildlife (DFW) for information regarding state-protected rare species in the vicinity of the above referenced site. I have reviewed the site and would like to offer the following comments.

Based on the project boundaries as delineated on the locus map you provided, the site occurs partially within Estimated Habitat WH 7/Priority Habitat PH 17, and is adjacent to WH 7421/PH 36 as indicated in the 11th Edition of the Massachusetts Natural Heritage Atlas. Our database indicates that the following protected rare species occur within these Habitats in the vicinity of the site:

Scientific name	Common Name	Taxonomic Group	State Rank
Notropis bifrenatus	Bridle Shiner	Fish	SC
Ambystoma laterale	Blue-Spotted Salamander	Amphibian	SC
Hemidactylium scutatum	Four-toed Salamander	Amphibian	SC
Clemmys guttata	Spotted Turtle	Reptile	SC
Emydoidea blandingii	Blanding's Turtle	Reptile	T
Enallagma laterale	New England Bluet	Damselfly	SC
Sparganium natans	Small Bur-reed	Vascular Plant	E

These species are protected under the Massachusetts Endangered Species Act (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00) as well as the state's Wetlands Protection Act (M.G.L. c. 131, s. 40) and its implementing regulations (310 CMR 10.00). Fact sheets for many of these species can be found on our website at www.state.ma.us/dfwele/dfw. In addition, Certified Vernal Pools # 1932 and 2786 occur in the vicinity of the site. Please contact the Georgetown Conservation Commission for information on these vernal pools.

Division of Fisheries and Wildlife
Field Headquarters, One Rabbit Hill Road, Westborough, MA 01581 (508) 792-7270 Fax (508) 792-7275
An Agency of the Department of Fisheries, Wildlife & Environmental Law Enforcement

This evaluation is based on the most recent information available in the Natural Heritage database, which is constantly being expanded and updated through ongoing research and inventory. Should your site plans change, or new rare species information become available, this evaluation may be reconsidered.

Using the list of rare species provided above, we recommend that rare wildlife and/or plant surveys be conducted by qualified individuals within suitable habitats on and near the site according to scientifically accepted survey methodologies. A Rare Animal/Plant Observation Form, available at our website www.masswildlife.org, should be submitted for each species encountered. If during this site evaluation rare species are found on or near the site, then site plans and a project description should be sent to NHESP Environmental Review to determine whether a probable "take" under the MA Endangered Species Act (G.L. c. 131A) would occur. If NHESP determines that the proposed project would "take" a rare species, and the site is greater than two acres, and within a Priority Habitat site, an Environmental Notification Form should be submitted pursuant to the MA Environmental Policy Act regulations (301 CMR 11.03(2)(b)(2)). If the project site does not occur within a Priority Habitat, but rare species have recently been found on or near the site, then site plans and a site description should be submitted for MESA review. A Conservation & Management Permit may be required for work in rare species habitat.

If the project site is within Estimated Habitat for Rare Wildlife and a Notice of Intent (NOI) is required, then a copy of the NOI must be submitted to the NHESP in a timely manner, so that it is received at the same time as the conservation commission. Using the species list provided above, the Resource Areas on the site should be evaluated as important wildlife habitat for state-protected species, focusing on those areas that provide feeding, breeding, over-wintering, shelter and migration functions. The project should be evaluated for compliance with the rare species performance standard, which is that there shall be no short or long-term adverse affects to the habitat (within Resource Areas)(310 CMR 10.37 and 10.59).

If you have any questions regarding this review, please contact Tom French, Assistant Director, at ext. 163.

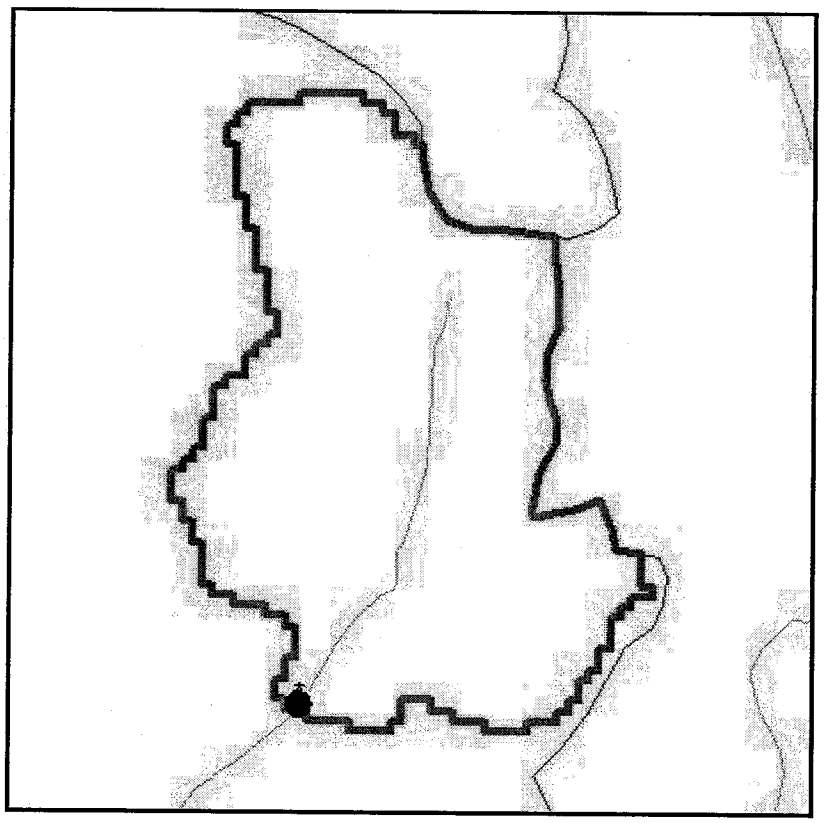
Sincerely,

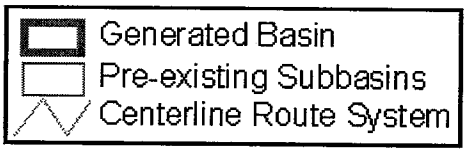
Thomas W. French

Thomas W. French, Ph.D
Assistant Director

USGS
science for a changing world

Streamflow Statistics Report





Date: Thu Dec 04 13:51:58 2003
Warning! Drainage Area outside allowable range. Prediction intervals not calculated.
Latitude: 42.7386
Longitude: -70.9986
Measured Basin Characteristics:
Drainage Area (square miles): 0.07
Stratified Drift Area (square miles): 0.04
Stream Length (miles): 0.27
Slope (percent): 0.00
Region: 0

Statistic	Estimated streamflow,	90% Prediction interval	

	ft^3/s	Minimum	Maximum
99-percent duration flow	0.00		
98-percent duration flow	0.00		
95-percent duration flow	0.00		
90-percent duration flow	0.00		
85-percent duration flow	0.00		
80-percent duration flow	0.00		
75-percent duration flow	0.01		
70-percent duration flow	0.02		
60-percent duration flow	0.04		
50-percent duration flow	0.06		
7-day, 2-year low flow	0.00		
7-day, 10-year low flow	0.00		
August median flow	0.00		

U.S. Department of the Interior, U.S. Geological Survey
10 Bearfoot Road
Northborough, MA 01532
(508) 490-5000

Maintainer: webmaster@mass1.er.usgs.gov

ATTACHMENT E

PROJECT PLANS

THIS PLAN IS FOR GENERAL INFORMATION. May Not Be Complete Or Correct In All Details And Should Not Be Used As A Basis Of Land Titles And Measurements Until Otherwise Confirmed.

TRUE NORTH

W.H.–W.A. 31
WILLIAM I. MARLOR ET UX
FEE SEE L–6184

W.H.–W.A. 34
HAROLD C. PYNN ET UX
EASE. SEE L–7518

W.H.–W.A. 34A
EASE. SEE L–9376

LINE 2329

HAVERHILL–NEWBURYPORT LINE

M.–E.E. EASEMENT

N.E.P.Co.

D.H.

LINE 2396

LINE 2377

LINE 2373

MATCH LINE ON T–2

#80 #124 #125 #126 #127 #128

#199 #200 #201

#1 #2 #3

23KV

115KV

BUS

1st Tap

#49S #49 #50G #50 #51 #52 #53 #91 #92 #93

Aerial Grd.Wire

Aerial Grd. Wire

BARN

W.H.–W.A. 33
SEE GEN. 13101
KING STREET 18 SUB, (0018)
H–62971 & D–6236

W.H.–W.A. 33
SEE GEN. 13101A
CLIFTON D. MAYO
FEE D–5362

W.H.–W.A. 32
OWNER UNKNOWN (CURTIS)
CONDEMNATION EASEM, L–7380

30'

75'

100'

LEGEND:

- EXISTING STONE WALL
- EXISTING POLE
- PROPOSED NEW POLE LOCATION
- PROPOSED NEW #2319 LINE
- APPROVED ACCESS ROUTE
- et5-14 FLAGGED WETLANDS (EARTH TECH FALL 2003)
- 100–FOOT WETLAND BUFFER

0 40 100 200 FEET

1"= 40'–0" HORIZONTAL

REVISED DECEMBER 2, 2003

NATIONAL GRID USA SERVICE COMPANY

MASSACHUSETTS ELECTRIC COMPANY

MAP OF
WARD HILL–WEST AMESBURY LINE
(VIA KING STREET SUBSTATION)

SHEET 1 OF 6

SCALE 1"=40' DATE JULY 12, 1962

THIS PLAN IS FOR GENERAL INFORMATION.
May Not Be Complete Or Correct In All Details And Should Not Be Used As A Basis Of Land Titles And Measurements Until Otherwise Confirmed.

T.-A. 91 D-9626-1

W.H.-W.A. 34A
EASE. SEE L-9376

KING STREET W.H.-W.A. 35

W.H.-W.A. 37
THELMA L. RICHARDSON ET AL
FEE SEE L-6391

W.H.-W.A. 38
DALE R. MITCHELL ET UX
EASEM. SEE L-7521

LINE #2373

R/W Markers

#90

D.H.

I.R.

N.E.P.Co.

MATCH LINE ON T-1

#4 #5 #6 #7 #8 #9 #9.1 #91 #92 #93 #202 #203

et 6-1 et 6-2 et 6-3 et 6-4 et 6-5 et 6-6 et 6-7

et 7-1 et 7-2 et 7-3 et 7-4 et 7-5 et 7-6 et 7-7 et 7-8 et 7-9 et 7-10 et 7-11 et 7-12 et 7-13 et 7-14 et 7-15 et 7-16 et 7-17 et 7-18 et 7-19 et 7-20 et 7-21 et 7-21a et 7-21b et 7-21c et 7-21d et 7-21e et 7-21f et 7-21g et 7-22 et 7-23 et 7-24 et 7-25 et 7-26 end

et 8-1 et 8-2 et 8-3 et 8-4 et 8-5 et 8-6

et 10-1 et 10-2 et 10-3 et 10-4

et 9-5 et 9-6 et 9-7

s&s

30' 80'

R/W Markers

BARN

W.H.-W.A.-36
TOM M. FALE et ux
Easem. See L-7519

MATCH LINE ON T-3

LEGEND:

- EXISTING STONE WALL
- EXISTING POLE
- PROPOSED NEW POLE LOCATION
- PROPOSED NEW #2319 LINE
- APPROVED ACCESS ROUTE
- et5-14 FLAGGED WETLANDS (EARTH TECH FALL 2003)
- 100-FOOT WETLAND BUFFER

0 40 100 200 FEET

1"= 40'-0" HORIZONTAL

REVISED DECEMBER 2, 2003

NATIONAL GRID USA SERVICE COMPANY

MASSACHUSETTS ELECTRIC COMPANY

MAP OF
WARD HILL-WEST AMESBURY LINE
(VIA KING STREET SUBSTATION)

SHEET 2 OF 6

SCALE 1"=40' DATE JULY 12, 1962

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Kst.-1-5
W.H.-W.A. 36
TOM M, FALE et. ux
EASE. L-8191
EASE. L-7521

Kst.-1-4
W.H.-W.A. 38
DALE R. MITCHELL
EASE. L-8191
EASE. L-7521

True North

Stone

S.&S.

Black Oak Tree

Kst.-1-7
BEVERLY MOTOR SALES CO. INC. et. ali
Cond. L-8102

MATCH LINE ON T-2

#10 #11 #12 #13 #14

30' 50' 50'

S87°26'E

ACCESS FROM EVERGREEN

et 9-1 et 9-2 et 9-3 et 9-4 et 9-5 et 9-6 et 9-7 et 9-8 et 9-9 et 9-10 et 9-11 et 9-12 et 9-13 end open

et 11-1 et 11-2 et 11-3 et 11-4 et 11-5 et 11-6 et 11-7 et 11-8 et 11-9

et 11a-1 et 11a-2 et 11a-3 et 11a-4 et 11a-5 et 11a-6 et 11a-7 et 11a-8 et 11a-9 et 11a-10

Stk.

MATCH LINE BOTTOM

Kst.-1-5
W.H.-W.A. 36
DAVID. T. DYES et. ux
EASE. L-8193

Kst.-1-5
W.H.-W.A. 36
TOM M, FALE et. ux
EASE. L-8192
EASE. L-7519

GEORGETOWN, MASSACHUSETTS
ESSEX,COUNTY

TOWN OF GROVELAND

MATCH LINE ABOVE

Stk.

#15 #16 #17 #18 #19

D.H.

D.H.

COMMONWEALTH OF MASSACHUSETTS
PARKER RIVER WILD LIFE REFUGE
CRANE POND DIVISION
EASE SEE L-7890

et 12-1 et 12-2 et 12-3 et 12-4 et 12-5 et 12-6 et 12-7 et 12-8 et 12-9 et 12-10 et 12-11 et 12-12 et 12-13 et 12-14 et 12-15 et 12-16 et 12-17 et 12-18 et 12-19

S86°56'E

et 13-1 et 13-2 et 13-3 et 13-4 et 13-5 et 13-6 et 13-7 et 13-8 et 13-9 et 13-10 et 13-11 et 13-12 et 13-13 et 13-14 et 13-15 et 13-16 et 13-17 et 13-18 et 13-19 et 13-20 et 13-21 et 13-22 et 13-23 et 13-24

61

60

59

T.L.B.

GROVELAND
GEORGETOWN

MATCH LINE ON T4

GEORGETOWN, MASSACHUSETTS
ESSEX,COUNTY

LEGEND:

- EXISTING STONE WALL
- EXISTING POLE
- PROPOSED NEW POLE LOCATION
- PROPOSED NEW #2319 LINE
- APPROVED ACCESS ROUTE
- et5-14 FLAGGED WETLANDS (EARTH TECH FALL 2003)
- 100-FOOT WETLAND BUFFER

0 40 100 200 FEET

1"= 40'-0" HORIZONTAL

REVISED DECEMBER 2, 2003

NATIONAL GRID USA SERVICE COMPANY

MASSACHUSETTS ELECTRIC COMPANY

MAP OF
WARD HILL-WEST AMESBURY LINE
(VIA KING STREET SUBSTATION)
SHEET 3 OF 6

SCALE 1"=40' DATE JULY 12, 1962

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True North

MATCH LINE ON T-3

MATCH LINE BELOW

#20 #21 #22 #23

et 14-1 et 14-2 et 14-3 et 14-4 et 14-5 et 14-6 et 14-7 et 14-11

et 14a-1 et 14a-2 et 14a-3 et 14a-4 et 14a-5 et 14a-6 et 14a-7

et 15-1 et 15-2 et 15-3 et 15-4 et 15-5 et 15-6 et 15-7

et 16-1 et 16-2 et 16-3 et 16-4 et 16-5 et 16-6 et 16-7 et 16-8 et 16-9 et 16-10 et 16-11 et 16-12 et 16-13 et 16-14

et 16a-1 et 16a-2 et 16a-33 et 16a-4 et 16a-5 et 16a-6 et 16a-7

D.H.

55 54 53 52

Kst. I-9
RALPH A. YEATON et.all
FEE SEE L-7988

MATCH LINE ABOVE

#24 #25 #26 #27 #28

S63°41'E

et 17-1 et 17-2 et 17-3 et 17-4

50' 30' 60'

Kst. I-10
ALFRED H. DOLE
EASE L-8194

et 18-1 et 18-2 et 18-3

MATCH LINE ON T5

LEGEND:

- EXISTING STONE WALL
- EXISTING POLE
- PROPOSED NEW POLE LOCATION
- PROPOSED NEW #2319 LINE
- APPROVED ACCESS ROUTE
- et5-14 FLAGGED WETLANDS (EARTH TECH FALL 2003)
- 100-FOOT WETLAND BUFFER

GEORGETOWN, MASSACHUSETTS
ESSEX,COUNTY

0 40 100 200 FEET

1"= 40'-0" HORIZONTAL

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NATIONAL GRID USA SERVICE COMPANY

MASSACHUSETTS ELECTRIC COMPANY

MAP OF
WARD HILL-WEST AMESBURY LINE
(VIA KING STREET SUBSTATION)

SHEET 4 OF 6

SCALE 1"=40' DATE JULY 12, 1962

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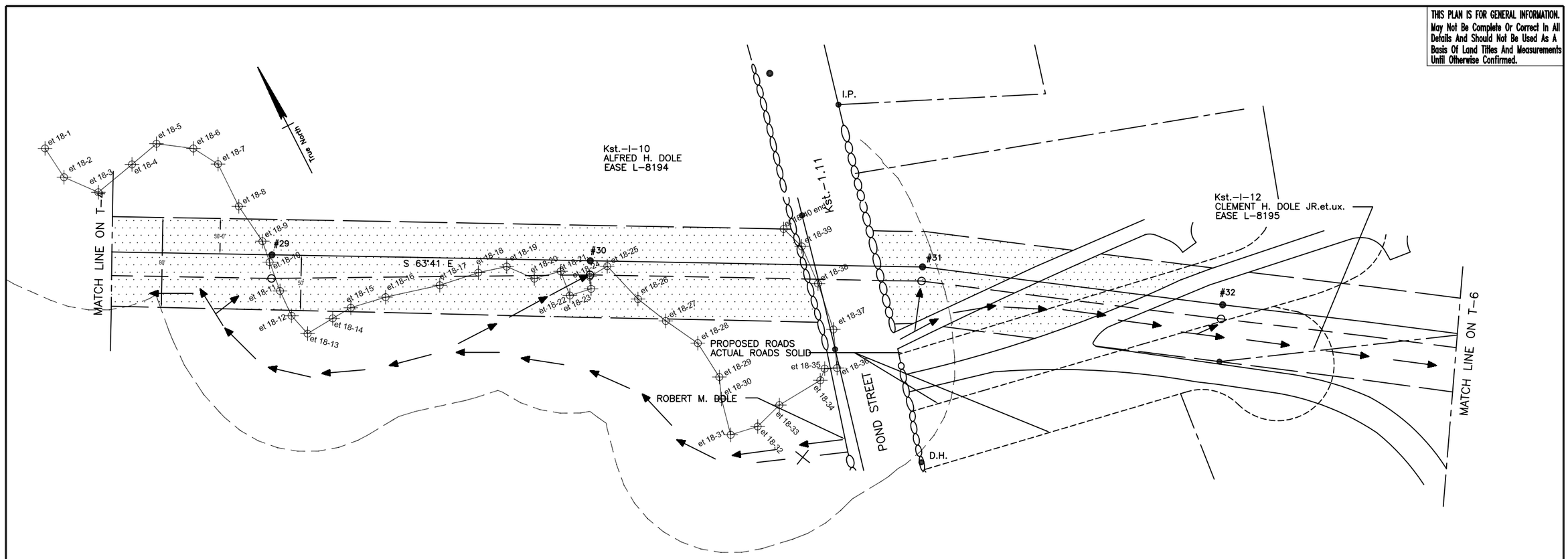

GEORGETOWN, MASSACHUSETTS
ESSEX,COUNTY

LEGEND:

- EXISTING STONE WALL
- EXISTING POLE
- PROPOSED NEW POLE LOCATION
- PROPOSED NEW #2319 LINE
- APPROVED ACCESS ROUTE
- et5-14 FLAGGED WETLANDS (EARTH TECH FALL 2003)
- 100-FOOT WETLAND BUFFER

0 40 100 200 FEET

1"= 40'-0" HORIZONTAL

REVISED DECEMBER 2, 2003

NATIONAL GRID USA SERVICE COMPANY

MASSACHUSETTS ELECTRIC COMPANY

MAP OF

WARD HILL-WEST AMESBURY LINE
(VIA KING STREET SUBSTATION)

SHEET 5 OF 6

SCALE 1"=40' DATE JULY 12, 1962

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LEGEND:

- EXISTING STONE WALL
- EXISTING POLE
- PROPOSED NEW POLE LOCATION
- PROPOSED NEW #2319 LINE
- APPROVED ACCESS ROUTE
- et5-14 — FLAGGED WETLANDS (EARTH TECH FALL 2003)
- 100–FOOT WETLAND BUFFER

True North

MATCH LINE ON T5

#33

#34

#35

#36

#36 1/2

#1

#2

#37

D.H.

D.H.

S58°01'E

UPLAND

et 19-6 end
et 19-5
et 19-4
et 19-3
et 19-2
et 19-1

et 19u-1
et 19u-2
et 19u-3
et 19u-4
et 19u-5
et 19u-6
et 19u-7
et 19u-8
et 19u-9
et 19u-10

Kst.–I–13
ROBERT H. DOLE et.ux.
EASE L–8196

Kst.–I–15
ROBERT M. Copp et.ux.
EASE L–8197

Kst.–I–14
GEORGETOWN SAND & GRAVEL CO. INC
Cond. L–8093

et 19a-1
et 19a-2
et 19a-3
et 19a-4
et 19a-5
et 19a-6
et 19a-7
et 19a-8
et 19a-9
et 19a-10
et 19a-11
et 19a-12
et 19a-13
et 19a-14
et 19a-15
et 19a-16
et 19a-17

et 20-9
et 20-10
et 20-11
et 20-12
et 20-13
et 20-14
et 20-15
et 20-16
et 20-17
et 20-18
et 20-19

Trimming Rights

2373 Line

2329 Line

Kst.–1–16

NEWBURYPORT LINE

HAVERHILL

M.E.L. Co.

GEORGETOWN SAND & GRAVEL COMPANY

12' R.O.W. TO GEORGETOWN SAND & GRAVEL COMPANY

PARKER RIVER

Trimming Rights

ACCESS FROM MILL STREET

MATCH LINE ON T–7395–6

200 FOOT RIVERFRONT AREA

200 FOOT RIVERFRONT AREA

GEORGETOWN, MASSACHUSETTS
ESSEX,COUNTY

0 40 100 200 FEET

1"= 40'–0" HORIZONTAL

REVISED DECEMBER 2, 2003

NATIONAL GRID USA SERVICE COMPANY

MASSACHUSETTS ELECTRIC COMPANY

MAP OF

WARD HILL–WEST AMESBURY LINE
(VIA KING STREET SUBSTATION)
SHEET 6 OF 6

SCALE 1"=40' DATE JULY 12, 1962